ANALYSIS OF SPONTANEOUS LABOUR AND NOMOGRAMS IN LABOUR

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CHENNAI.

CERTIFICATE

This is to certify that this dissertation titled "**ANALYSIS OF SPONTANEOUS LABOUR AND NOMOGRAMS IN LABOUR**" has been done by **Dr.T.YASODHARANI**, her original work and this manuscript is an outcome based on the results of the study conducted by her at this institution. This dissertation is done in partial fulfillment and submitted to the university for the award of M.D Obstetrics and Gynaecology.

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CONTENTS

INTRODUCTION

Labour is a very important event in a woman's life. It would turn out to be a memorable and cherishable one in her life time if she delivers a baby, healthy and undamaged. It may turn out to be horror if she has confronted with a labour which was a tardy and prolonged one with an end with a damaged baby. The sorrow may prolong to even a death of a baby, carried all days long in her womb with care and expectations. It may put her to a morbid state for life long with a Vesico Vaginal or Recto Vaginal Fistula (though very very rare these days).

Last but not the least complication may bring an end to the life of a young mother which would pose an immense loss both to her family and the society. A maternal death would deprive her children both mentally and physically.

In view of the unacceptably high maternal mortality and morbidity and the social impact of a maternal death to the family and children "SAFE MOTHERHOOD INITATIVE" conference was held at Nairobi in Feb. 1987.

World Health Organization has conducted a multi centre trial covering over 35000 labouring women. They showed that the use of partograph decreased the LSCS rate, low Apgar scores, need for augmentation and perinatal mortality and morbidity. It was used to decrease prolonged labour from 6.4% to 3.4%.

Partogram is a latin Greek hybrid word synonymous with parturition recorded in graphic form . The partographic control of labour has outdated a feeling of normal labour based on arbitrary time limits. It gives a visual display of labour events at a glance.

In this study labour patterns of 300 primi gravidae and 300 multigravidae has been analyzed and compared with the aid of WHO partograph.

AIMS OF STUDY

- Analysis of labour pattern in uncomplicated cases of Primi & Multi gravida in our institution who went into spontaneous labour.

- Detection of dysfunctional labours earlier in Primi & Multi. So intervention can be done at appropriate time.

- Record various events of labour graphically in a single sheet so that aberrations of labour can be detected earlier.

- Find the value of alert and action line in deciding the mode of delivery.

- To construct nomograms in labour for primigravida admitted in this hospital

HISTORY & REVIEW OF LITERATURE

Normal labour is the spontaneous onset of regular painful uterine contractions associated with the effacement and dilatation of the cervix and descent of the presenting part, with or without a ‘show’ or ruptured membranes. This process culminates in the birth of a healthy baby followed by expulsion of the placenta and membranes. In most cases, the outcome can be predicted prospectively by observing the progress of cervical dilatation and descent of the presenting part. Although labour is a dynamic, continuous process it is normally divided into three functional stages for the purpose of management – the first, second and third stage of labour.

In 1816- Ebermairer – documented palpatory observation of cervix dilatation.

1921- Liepman- Standardisation of cervix dilatation in cms.

1930- 31- Calkins & his Co workers clinically evaluated labour by objective data bearing on variation in the length of the stages of labour in relation to maternal age, size of the pelvis & fetal weight on basis of intensity of uterinecontraction, degree of cervix effacement, softening of the cervix & engagement of presenting part.

1946- Wolf-need for exact timely registration of the progress of cervix dilatation plotted against the number of of hours prior to delivery related only to the rupture of membranes & its effect on labour.

1948- Koller described a graphic representation of the course of labour to facilitate practical control of entire labour process and aid in its scientific study. His partogram records zero time as representing the point at which the membranes ruptured since amniotomy shorten the labour.

1950-52- koller & ABT reported that at the point of onset of uterine contraction the curve is horizontal along the upper border of the partogram. The greater the inclination faster the labour. When it is more flattened the labour is slower. Horizontal is arrested labour. The diversion represented 1-2 fingers, 3 fingers, small palm (circumference 6 cms) palm (circumference 8 cm) full dilatation, delivery of the infant & the placenta.

1951- Zimmer using a course time graph modified from the earlier work of wolf. Here also rupture of membrane was the central point of reference.

1954- Emmanvel A.Friedman analysed the labour pattern in a large number of U.S.A. women & described a graphical way of representing the cervix dilatation pattern in labour. This is the basis of modern partogram. Before Friedman's period, the diagnosis of prolonged period was mostly based on the total elapsed time using several arbitrary minimum time limits such as 24 or 30 or 36 hrs. This included several aberration some normally progression & quite uncomplicated labour may last longer than given critical limits.

While some ominous labour patterns are potentially so hazardous that they should be recognized long before any critical duration is exceeded. Friedman determined that 10% of all labour under 20 hrs. that were clinically designated as normal were actually abnormal when analysis graphically.

He demonstrated that labour can be objectively analysed by means of simple graph in a square rule graph paper relating progress changes in cervix dilatation and in station of the presenting part to elapsed time in labour. In all normal labours a characteristic hyperbolic curve of descent.

Friedman divided the I stage of labour into latent phase which extend from the onset of labour to the upswing of the curve, and the active phase which begins with the upswing and terminates at the full dilatation of cervix at the onset of 2^{nd} stage. He further subdivided the active phase into an initial accelerate phase a middle linear phase maximum slope & terminal deceleration phase . Friedman defined six specific & easily recognized labour pattern preparatory division (latent and acceleration phases of dilatation curve) Dilatation division (phase of maximum slope of dilatation) and a pelvic division (deceleration & 2^{nd} stage combined)

1972- Philpott and Castle in 1972 introduced the concept of "ALERT" and "ACTION" lines. The aim of this study was to fulfill the needs of paramedical personnel practising obstetrics in Rhodesian African primigravidae. The alert line represented the mean rate of progress of the slowest 10% of patients in the African population whom they served. Alert line was drawn at a slope of 1 centimetre/hr for nulliparous women starting at zero time i.e. time of admission . Action line drawn four hours to the right of the alert line showing that if the patient has crossed the alert line active management should be instituted within 4 hours, enabling the transfer of the patient to a specialised tertiary care centre. The action line was subsequently drawn two hours to the right of the alert line

1972- Studd's labour stencils were introduced in 1972. These stencils predicted the expected pattern of progression of labour based on the extent of dilataton achieved by the time the patient is admitted (zero time). Curves showing the average course of cervical dilatation were constructed for various dilatation on admission. Five separate patterns representing normal labour progression were constructed. The curves were transcribed onto acrylic stencils On admission in labour, the cervical dilatation was assessed and a stencil was used to draw the relevant pencil line of expected progress on the patient's cervicograph which was then completed. Those crossing the nomogram line were found to have a three fold increase in instrumental delivery

1973- Kalyan kutty & Raja gopalan engaged vs unengaged head in primi using friedman curve.

1976- Herz mulmud- studied the predictive value of cervical dilatation rate using a modified version of Philipotts partogram.

1977- Lion M.A. – wong W.P. studied normal labour & found that it took 10hrs to reach full dilatation in 93.7% primi & 97.9% multis. Indian primis had longer latent phase than malasian primis.

1979- Ragucci et al studied the use of partogram in the management of women in labour.

1984- Arulkumaran et al studied the effect of parity on uterine activity in labour. Profiles of dilatation specific activity values were constructed.

They concluded that parous uterus requires significantly less effort to effect normal vaginal delivery than in primi.

1993- Popov et al studied the role of age on the disorders of progress of labour. They concluded that after 25 years of age the total duration of labour increases & the incidence of protracted active phase increases. There was no effect on latent phase or arrest disorders.

1994- WHO conducted a multicentre trial in SE Asia covering 35000 parturients monitored by partogram . The requirement of augmentation reduced from 20.7 to 9.1% LSCS rate fell from 9.9% to 8.3% and intrapartum still birth rates from .5 to .3% .

WHO partograph indicates three components

1.Fetal well being.
2.Progress of labour.
3.Maternal well-being.

Fetal Well Being:

Fetal heart rate:

Recorded at the top of partograph, fetal heart rate is listened for 1 minute every 1/2hr just after contraction has passed its strongest phase. If an abnormal fetal heart rate is heard listen more & frequently (every 15minutes).

If fetal heart rate remain abnormal over 3-observation action should be taken immediately.

Membrane and Liquor:

1.Intact membrane I
2.Absent membrane clear liquor. C
3.Membrane stained M
4.Absent membrane no liquor A

This observation is made at each examination.

Moulding of Fetal Skull Bones:

1.Bornes are separated and softness can be felt easily record as 0.
2.Bones are just touching each other.
3.Bones are overlapping & could be reduced.
4.Bones are overlapping severely and could not be separated .

Progress of labour:

Partogram should be started only when women is in labour. The contraction must be 2 or more in 10 minutes each lasting for 20 sec or more.

Dilatation Of Cervix:

In the centre of the partograph is a graph. indicating cervix dilatation against time. Along the left are numbers 0-10 against sequence. Each square represents 1 cm dilatation. Along the bottom of the graph are numbers 0-24 each square represents 1 hour.

Dilatation of Cervix is plotted with X. When admission is in latent phase and she goes into active phase in less than 8 hour then the plotting must be transferred by a broken line to the

alert line using the letter 'TR' leaving the area between the transferred recording blank.

Vaginal examination is done at the 4-hour individual and the finding plotted when labour progresses well, the dilatation should not move to the right of alert line.

Descent Of Fetal Head:

Descent is measured by abdominal palpation by Notelowitz method with empty bladder. Expressed in term of fifths above brim. Head is engaged when it is 2/5 palpated or less. After full dilatation of Cervix the progress is arrested only by the descent of presenting part.

Uterine Contraction:

Both the frequency and duration of contraction monitored. Frequency is measured by number of contractions per 10-minute period. Each square represents one contraction. Duration is represented and monitored by differential shading.

Maternal Well-Being:

Recorded at the foot of partograph below the recording of Uterine contraction.

1. Pulse rate every ½ hour
2. Blood pressure and Temperature every 4 hour
3. Urine volume every 4 hour
4. Intravenous Fluids in appropriate column
5. Oxytocin required drops/mt

WHO Protocol for Managing of Labour:

Latent & Active phase:

- **Unless complications develop do not augment with Oxytocin or intervene.**
- In latent phase artificial rupture of membranes should not be done.
- artificial rupture of membranes can be done at any time in active phase.

Prolonged latent phase more than 8 hours:

- If the woman is not in labour abandon partograph.
- If contraction pattern and cervix assessment suggest that she is in labour artificial rupture of membranes+oxytocin.
- If there is fetal distress or factors likely to need to be observed are there if any complicate requiring terminating of labour then determine LSCS.

Crossed Alert Line:

- .In PHC-Transfer to institution of facilities for LSCS unless the cervix almost fully dilated.
- .In hospital-Perform artificial rupture of membranes & continue Routine observation.

Crossed / Reached Action Line:

Full review of maternal and fetal condition.

Option:

- If there is cephalo pelvic disproportion or fetal distress Delivery by LSCS.
- If there is no cephalo pelvic disproportion /Fetal distress Oxytocin drip.

In cases continuing Labour:

Further review should be done at frequent a interval. If the progress is satisfactory then continue the observation. If there is less then 1cm/hr dilatation between any of this examination then delivery by LSCS is indicated.

Check fetal heart rate every 15 minutes.

1994 Juntunen K, Kirkinen P, Department of Obstetrics and Gynaecology, University of Ovlu, Finland studied the Partograms of grand multipara and compared with nullipara or second or third para females. The grand multiparas had the shortest duration of latent phase and second stage but the active slope of cervical dilatation was in all groups the same 2.8 cm per hour.

1995 Clinical trial of active management of labour was done at Department of Obstetrics and Gynaecology, Bringham and Womens Hospital, Boston, M.A, U.S.A. It was said that active management of labour did not decrease caesarean rates but was associated with shorter duration of labour and less maternal fever.

1999 A study was conducted at Liver Pool Womens Hospital, Merseyside, U.K on managing labours using Partogram with different action lines.

2000 Second stage Partogram study at Department of Obstetrics and Gynaecology, University Hospital of Wales, Cardiff, U.K proved that second stage Partogram offers an objective basis for managing second stage of labour.

2000 Chabra.S, Gandhi.O, Jaiswal.M, Mahatma Gandhi Institute of Medical Sciences, Maharastra, did a study on Obstructed Labour – A preventable entity. It was said that timely diagnosis of malpresentation, pelvic contraction and use of Partogram at all levels would prevent obstructed labour.

2002 Study was conducted at National Institute of Child Health and Human Development/NIH to examine the patterns of labour progressions in

nulliparous parturients in obstetrics practice. The cervix dialated very slowly in active phase. It took 5.5 hours from 4 cm to 10 cm compared to 2.5 hours in Friedman curve.

2003 Myles T, Santolaya J, Maternal and neonatal outcomes in patients with prolonged second stage Obstet and Gynacol 2003, 102:52 – 8 showed that 80% of women with a second stage over 2 hours deliver vaginally, with over 65% delivering vaginally even if the second stage lasted over 4 hours

MATERIALS AND METHODS

This is a prospective study conducted at Government Hospital for Women and Children, Institute of Obstetrics and Gynaecology, Egmore attached to Madras Medical College, Chennai from September 2004 to August 2005.

INCLUSION CRITERIA

The study group included singleton pregnancies after 37 weeks of gestational age presenting by vertex who went into spontaneous labour. Patients in early labour were randomly selected for the study. The patients with any medical or obstetric complications which may require immediate intervention were not included in this study. Only multigravidae with previous good obstetric history were included in our study. 300 cases of Primigravidae and 300 cases of mulitgravidae were studied .

EXCLUSION CRITERIA

- Preterm labour

- Antepartum hemorrhage
- Pregnancy Induced Hypertension
- Severe Anaemia
- Major degrees of Cephalo Pelvic Disproportion
- Mal presentations and Foetal distress
- Post Caesarean Pregnancies
- Medical disorders complicating Pregnancies

PROTOCOLS

On admission a detailed history was elicited.

1) Name
2) Age
3) Parity
4) Status of booking
5) If booked investigations done
6) Social status
7) Literacy status

In multigravida-previous obstetric history regarding history of abortions, preterm labour, mode of delivery, whether institutional or home deliveries and condition of baby at birth was elicited.

On general examination, height and weight of the patient anaemia, pedal edema were looked for. Blood pressure was recorded. Respiratory and cardiovascular systems were carefully auscultated . Any anomalies in spines and lower limbs were noted.

A detailed obstetric examination was done. Height of fundus, back and limbs, head palpable in fifths,(Notelowitz method) fetal heart rate, tone and rhythm were noted. Vaginal examination was done under strict aseptic precautions- effacement, dilatation of cervix, presence or absence of membranes, station and position of fetal head, color of liquor (if membranes were absent) were noticed. Munrokerr & Muller method was used to assess the adequacy for pelvis.

These findings were recorded in the partograph. It the membranes were absent, injection Ampicillin 1gm intra muscularly was given after test dose. Patients were maintained on oral fluid. Urine output was monitored.

Basic investigation like urine analysis for albumin and sugar, haemoglobin & blood grouping & typing were done for all patients admitted.

Progress of labour was assessed by Abdominal examination by fifths palpable per abdomen and by pervaginal examination. Frequent emptying of bladder was encouraged .

Uterine contraction- Duration & frequency were monitored foetal heart rate was recorded after a contraction once in 30 minutes by Pinard's fetoscope in I stage of labour & once in 15 minutes in the 2^{nd} stage.

Maternal.pulse rate was recorded every half hour. Blood pressure, temperature & urine output was recorded every 4 hours. Urine for acetone was done whenever there were signs of dehydration. Pervaginal examination was done every 4 hours to assess the progress of labour.

METHODS OF INTERVENTION

When the progress of labour crosses the alert line, a thorough examination of the patient was made and disproportion ruled out. Fetal heart rate, maternal pulse rate and uterine contraction were observed carefully once in 15 min. in such patients. Expectant line of management was carried out if there were adequate uterine contractions. If case of hypotonic contraction oxytocin drip was started.

If uterine contraction were inefficient (ie <3 contraction /10 min) oxytocin drip was started 2.5 units of oxytocin in 500ml of 5% dextrose started with 10 drops/min. Dosage to be adjusted at half an hour interval to a max. 60 drop/mt monitoring the contractions and feotal heart rate.

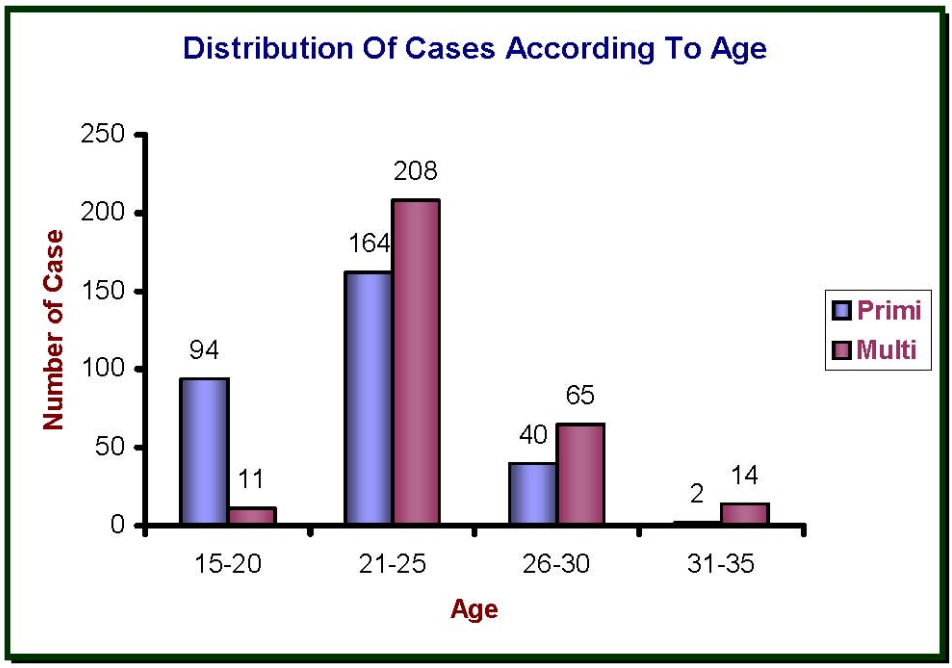
Under strict aseptic precautions amniotomy was done after 3 cm dilatation of cervix. The color and the amount of liquor were noted. Fetal heart was auscultated before & after amniotomy. Dilatation of cervix was noted & plotted in the graph. Station of the head & the presence of moulding was noted. Cephalopelvic disproportion was ruled out again.

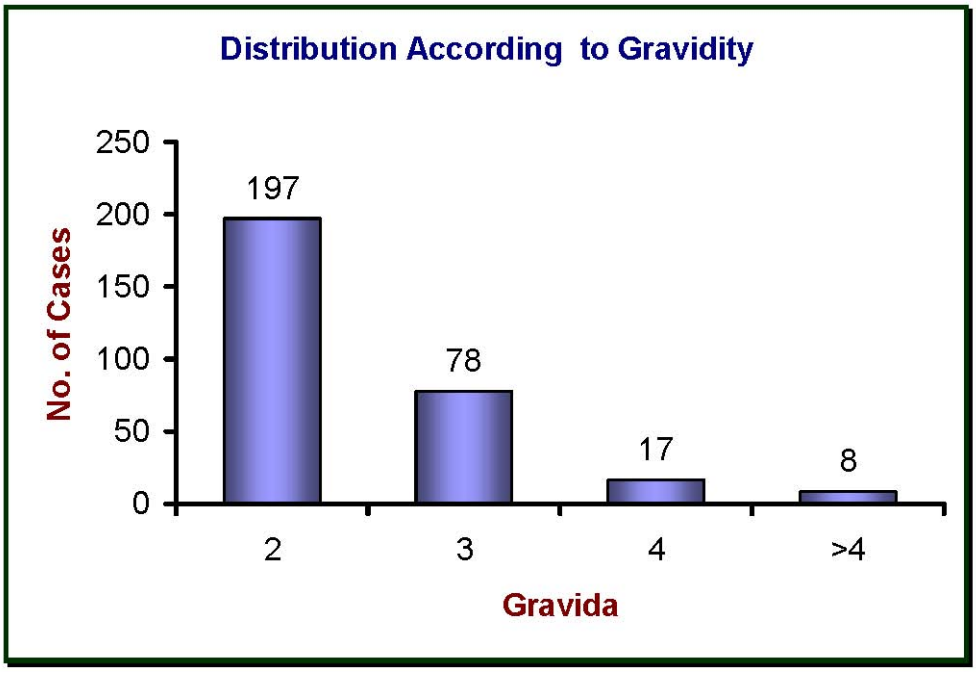
According to the contraction their frequency and duration, the drip rate was titrated to obtain effective uterine contraction (3 contraction in 10 min , each lasting for 45 sec). If the patient was admitted in latent phase, then the 1st recording was made at Ohr. If the patient was admitted in the active phase, recording were made at alert line, the clock time written in the space provided for time.

When the progress of labour crossed action line, reassessment of cephalo pelvic disproportion was done. In case of foetal distress baby was delivered by lower segment caesarean section. If no complications arose, acceleration of labour was carried out.

With full dilatation of cervix, if there was progressive descent of fetal head patient was delivered via. Labour naturale. With strict asepsis a medio lateral episiotomy was given in cases of need. (under local infiltration anaesthesia). In case of prolonged II stage reassessment was done delivery completed by forceps or vaccum depending on the station of fetal head (after fulfilling other criteria for forceps application ACOG 1991).

On delivery of the head mouth and nostrils were cleared of mucus. Prophylactic methyl ergometrine maleate was given after delivery of the anterior shoulder. After delivering the baby, conditon of the baby assessed by Apgar score. Umblical cord was clamped cut & ligated. Placenta & membranes delivered by Brandt & Andrew's method. After ruling out any laceration of soft tissues episiotomy was sutured. Partograph was completed. At the end of III stage Pulse & blood pressure were recorded. Patient was transferred from labour ward after 2 hrs of observation.


Distribution Of Cases According To Age
Number of Case
250
200
150
100
50
0
94
11
164
208
40
65
2
14
15-20
21-25
26-30
31-35
Age
Primi
Multi


Distribution According to Gravidity
No. of Cases
250
200
150
100
50
0
197
78
17
8
2
3
4
>4
Gravida

RESULTS

In our study labour of spontaneous onset in primigravida and multigravida were studied, their patterns monitored using WHO partograph.

Table 1: Distribution of cases according to age

Gravidity	**15 – 20 yrs**	**21 – 25 yrs**	**26 – 30 yrs**	**31 – 35 yrs**	**> 35 yrs**
Primi	94	164	40	2	
%	3	55	13	1	
Multi	11	208	65	14	2
%	3	69	22	5	1

Table 2: Distribution of cases according to gravidity

Primi	**2**	**3**	**4**	**> 4**
300	197	78	17	8

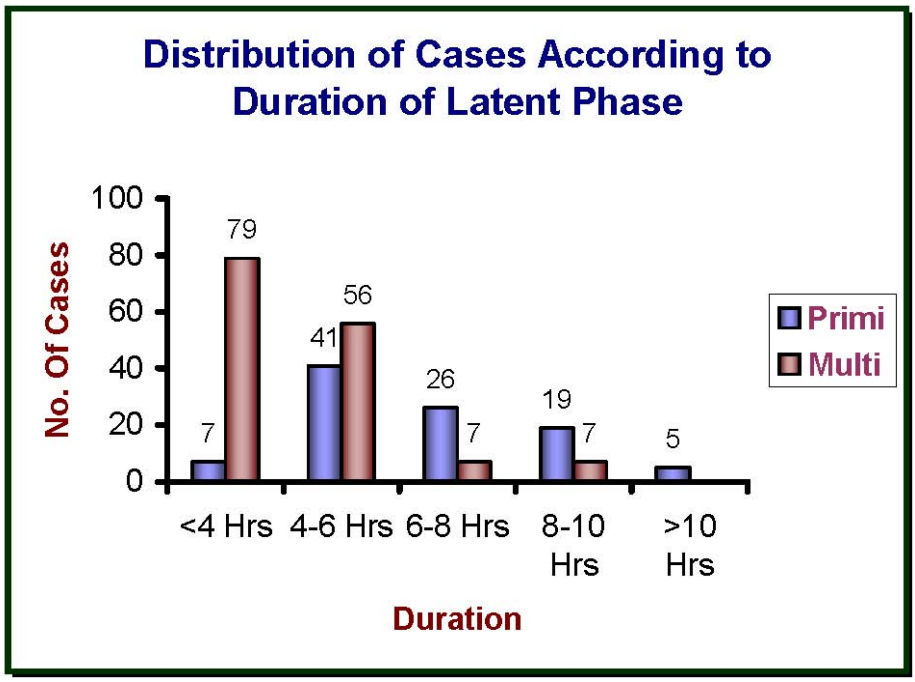
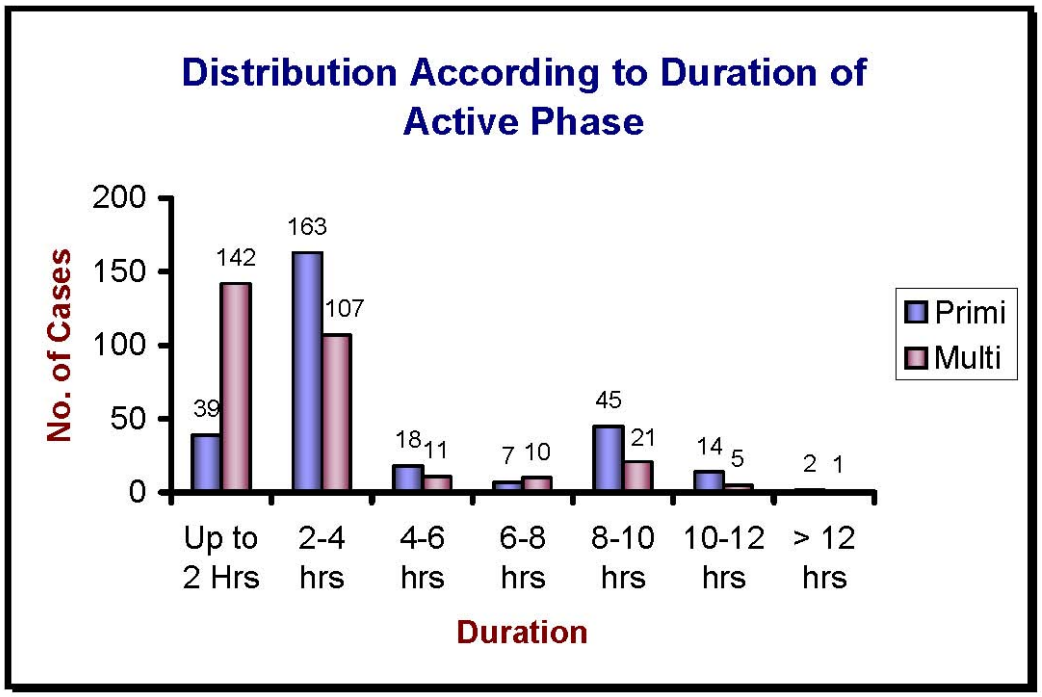


Table 3: Distribution with regard to duration of latent phase

Gravidity	Up to 4 hrs	4 – 6 hrs	6 – 8 hrs	8 – 10 hrs	>10 hrs
Primi	7	41	26	19	5
%	8	49	33	8	1
Multi	79	56	7	7	
%	53	37	5	5	



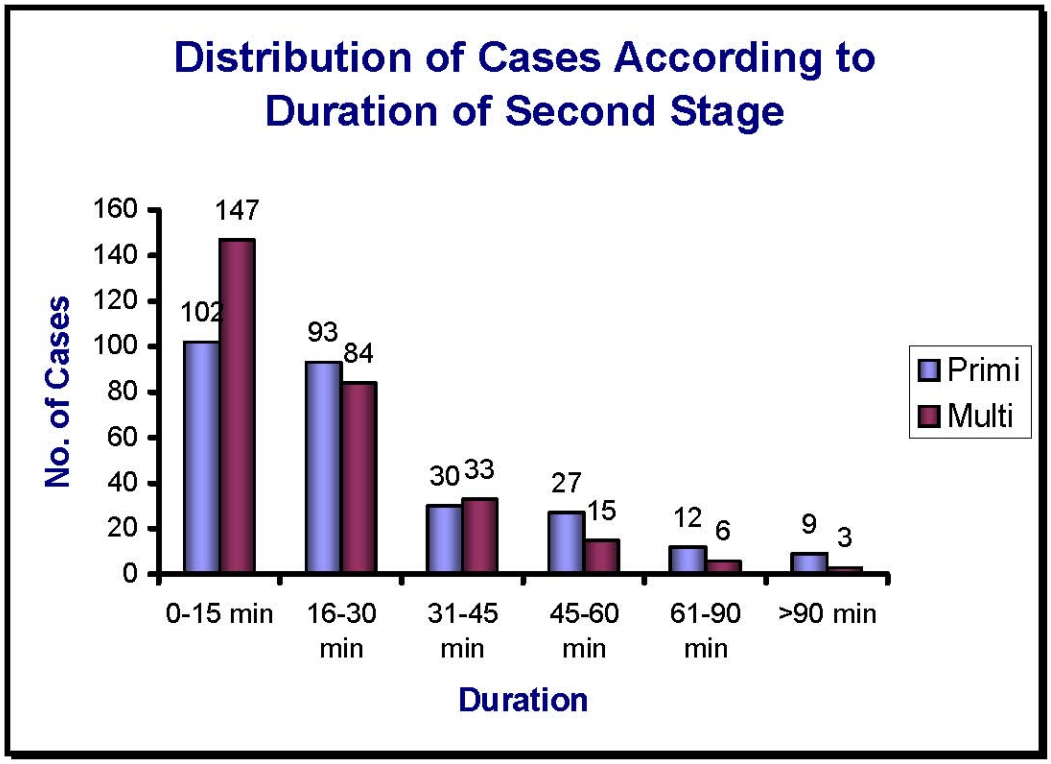


Table 4: Distribution according to Duration of Active phase

Gravidity	> 2 hrs	2 – 4 hrs	4 – 6 hrs	6 – 8 hrs	8 – 10 hrs	10 – 12 hrs	> 12 hrs
Primi	39	163	18	7	45	14	2
Primi%	13	54	6	2	15	5	1
Multi	142	107	11	10	21	5	1
Multi%	47	36	4	3	7	2	0

Table 5: Distribution of cases according to duration of 2nd stage

Gravidity	0 – 15 min	16-30 min	31-45 min	45-60 min	61 – 90 min	> 90 min
Primi	102	93	30	27	12	9
Primi%	34	31	10	9	4	3
Multi	147	84	33	15	6	3
Multi%	49	28	11	5	2	1

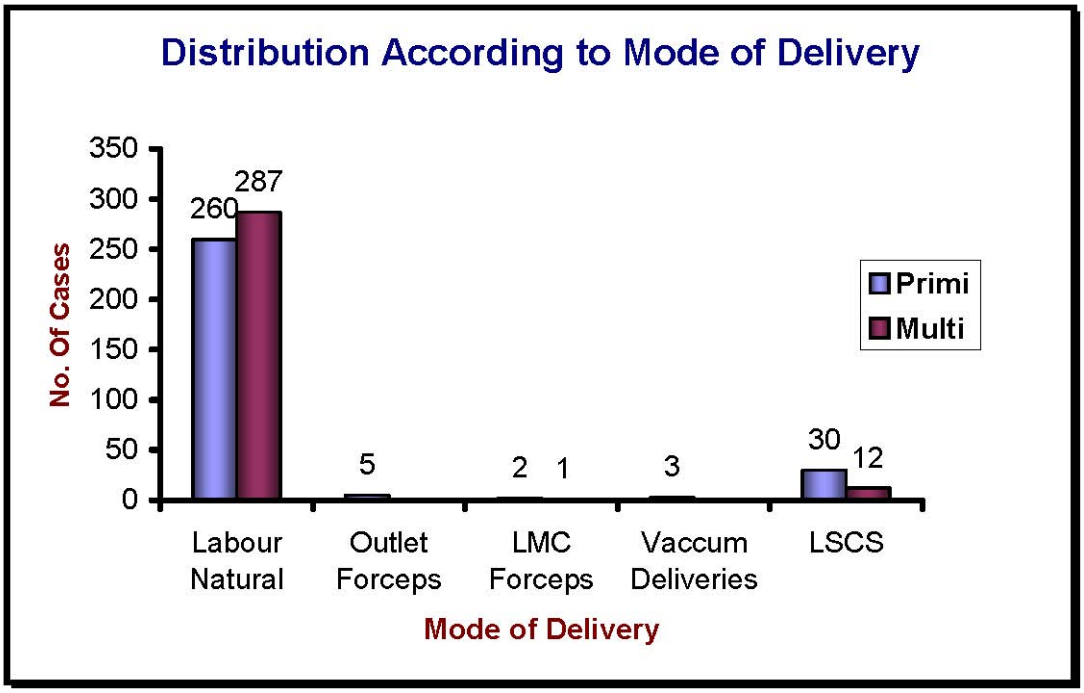


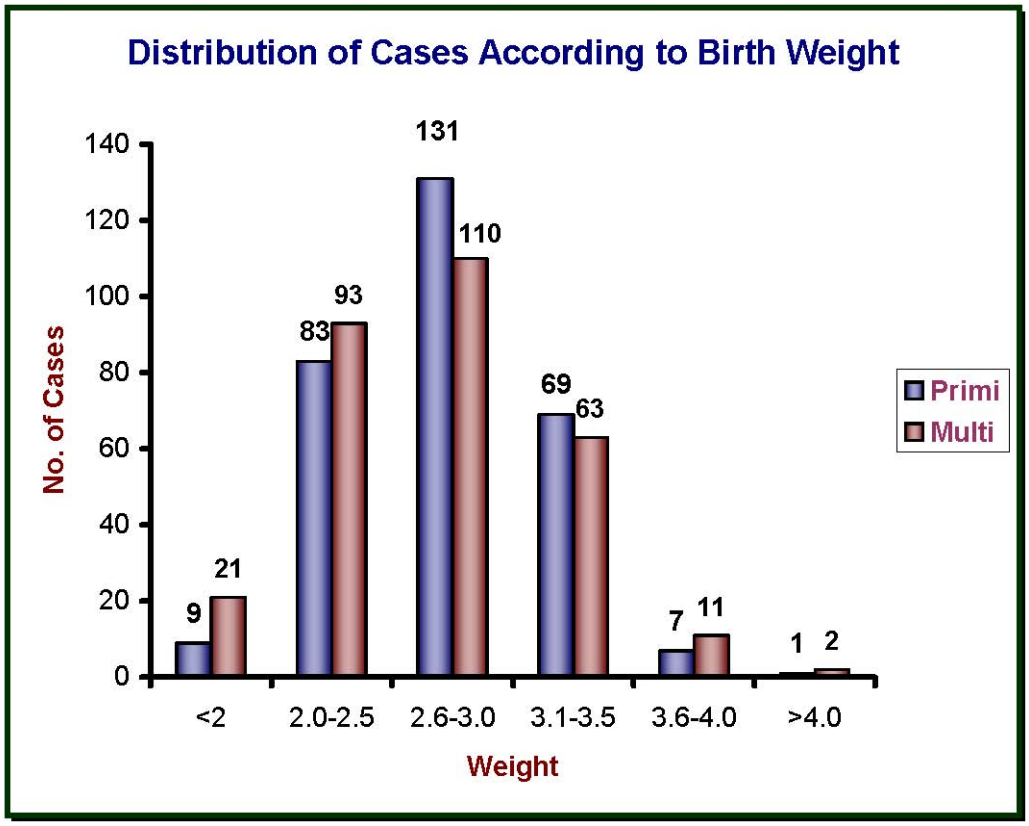
Table 6: Case distribution according to mode of delivery

Gravidity	Labour Natural	Outlet Forceps	LMC Forceps	Vaccum deliveries	LSCS
Primi	260	5	2	3	30
%	86.67	1.67	0.67	1	10
Multi	287		1		12
%	95.67	0	0.33	0	4

Table 7: Relationship of colour of liquor to mode of delivery

Gravidity	Meconium stained liquor	LSCS	Forceps	Vaccum	Labour Natural
Primi	31	7	2		22
Multi	24	6	1		17

On detecting meconium stained liquor delivery was based on dilatation of cervix, station of the presenting part and FHR.



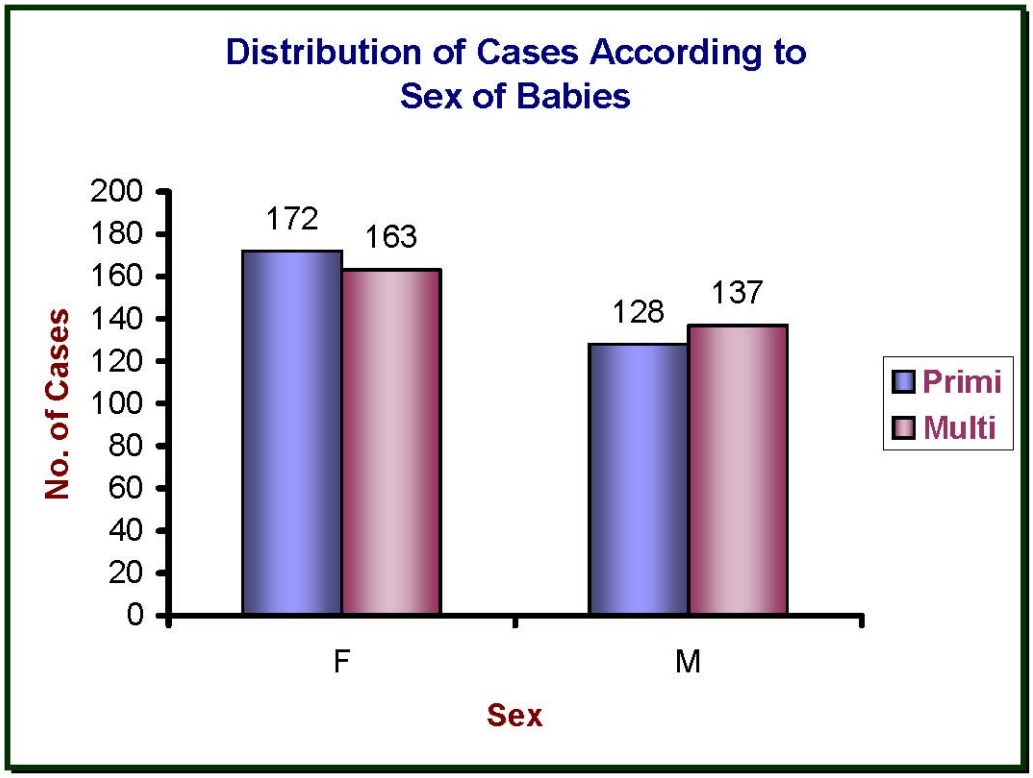


Table 8: Distribution according to type of intervention

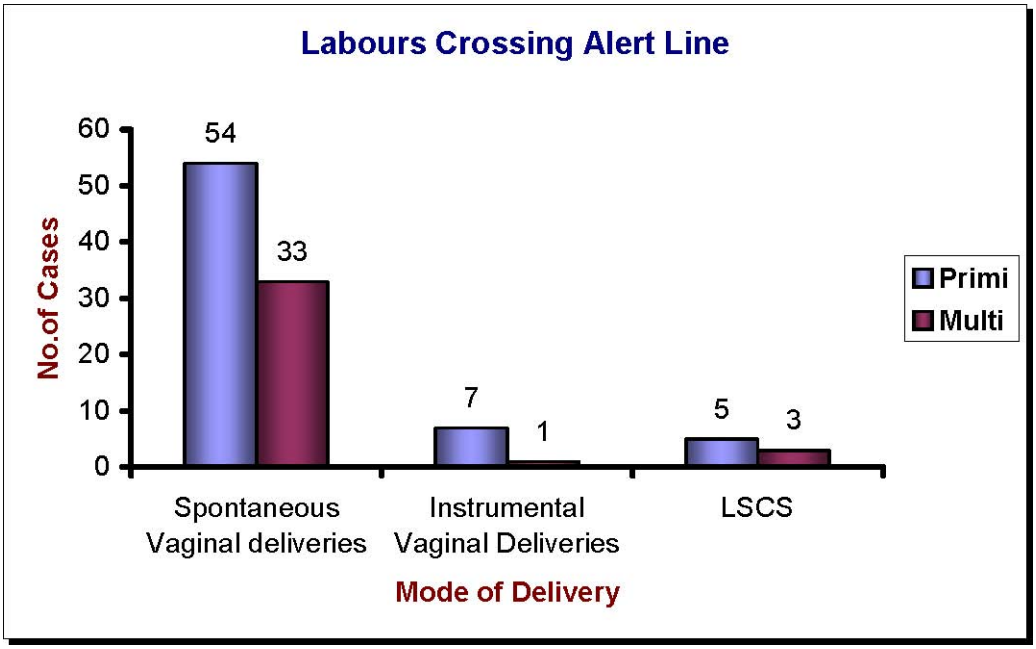
Gravidity	Oxytocin	ARM	ARM With Oxytocin
Primi	35	81	24
Multi	25	51	19

Table 9: Birth Weight Distribution

Gravidity	< 2 kg	2 – 2.5 kg	2.6-3 kg	3.1 - 3.5 kg	3.6-4 kg	> 4 kg
Primi	9	83	131	69	7	1
Multi	21	93	110	63	11	2

Table 10: Distribution of Sex of babies

Sex	Male	Female
Primi	128	172
Multi	137	163



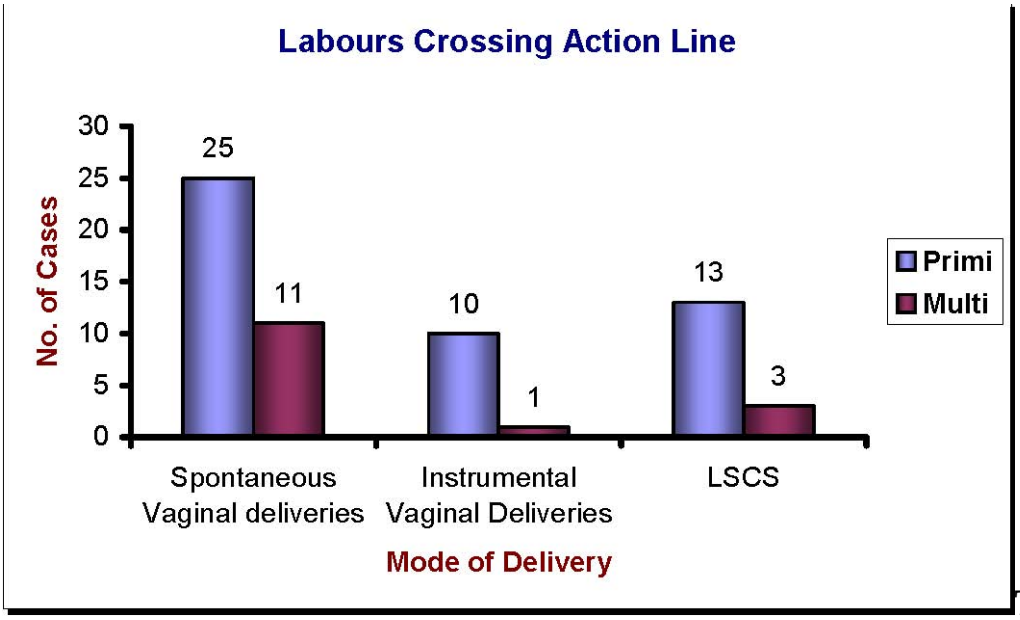
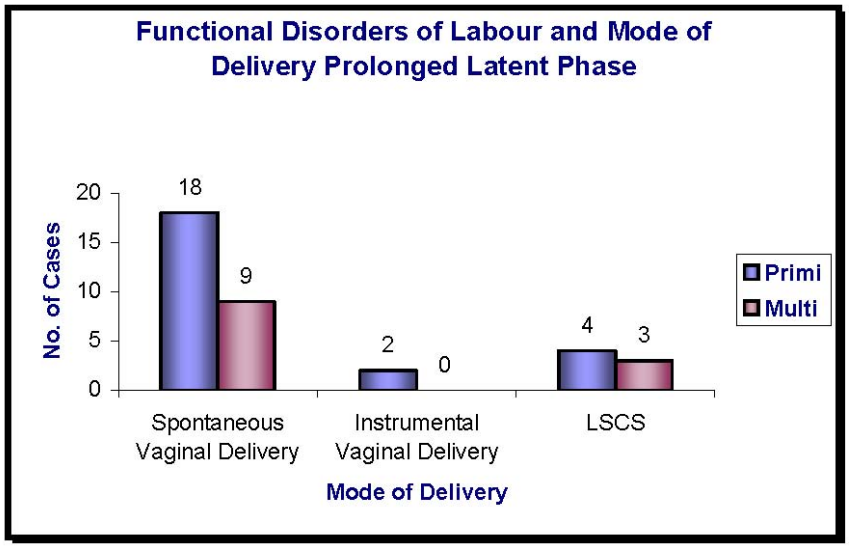
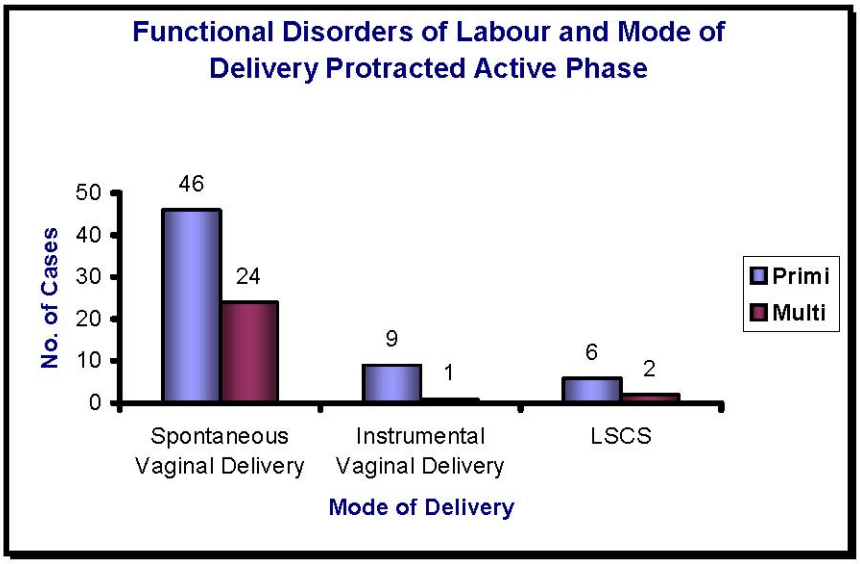


Table 11: Management depending on Partograph – labours Crossing alert and action lines

	Total No.		Spontaneous Vaginal deliveries		Instrumental Vaginal deliveries		LSCS	
	Primi	Multi	Primi	Multi	Primi	Multi	Primi	Multi

Crossed Alert line	66	37	54	33	7	1	5	3
%	32	19	82	88	10	2	8	10
Crossed Action line	48	15	25	11	10	1	13	3
%	16	5	52	73	21	7	27	20


Functional Disorders of Labour and Mode of Delivery Prolonged Latent Phase
No. of Cases
20
15
10
5
0
18
9
2
0
4
3
Primi
Multi
Spontaneous Vaginal Delivery
Instrumental Vaginal Delivery
LSCS
Mode of Delivery


Functional Disorders of Labour and Mode of Delivery Protracted Active Phase
No. of Cases
50
40
30
20
10
0
46
24
9
1
6
2
Primi
Multi
Spontaneous Vaginal Delivery
Instrumental Vaginal Delivery
LSCS
Mode of Delivery

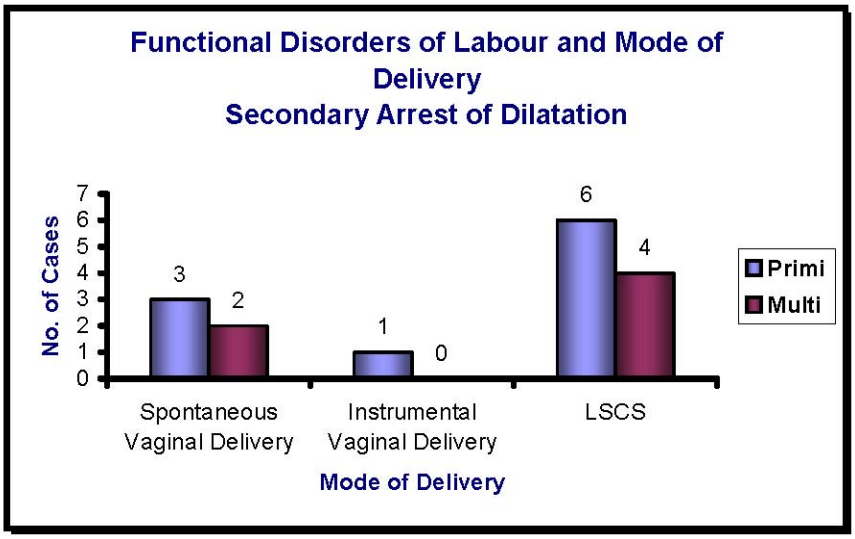

Functional Disorders of Labour and Mode of Delivery
Secondary Arrest of Dilatation
No. of Cases
7
6
5
4
3
2
1
0
3
2
1
0
6
4
Primi
Multi
Spontaneous Vaginal Delivery
Instrumental Vaginal Delivery
LSCS
Mode of Delivery

Table 12: Functional disorders of labour

	Total No.		Spontaneous Vaginal deliveries		Instrumental Vaginal deliveries		LSCS	
	Primi	Multi	Primi	Multi	Primi	Multi	Primi	Multi
Prolonged Latent Phase	24	12	18	9	2		4	3
%	8	4	75	75	8		17	25
Protracted Active Phase	61	27	46	24	9	1	6	2
%	20.5	9	75	89	15	4	10	7
Secondary Arrest of dilatation	10	6	3	2	1		6	4
%	3	2	30	33	10		60	67
Secondary Arrest of descent	2						2	
%	.6						100	

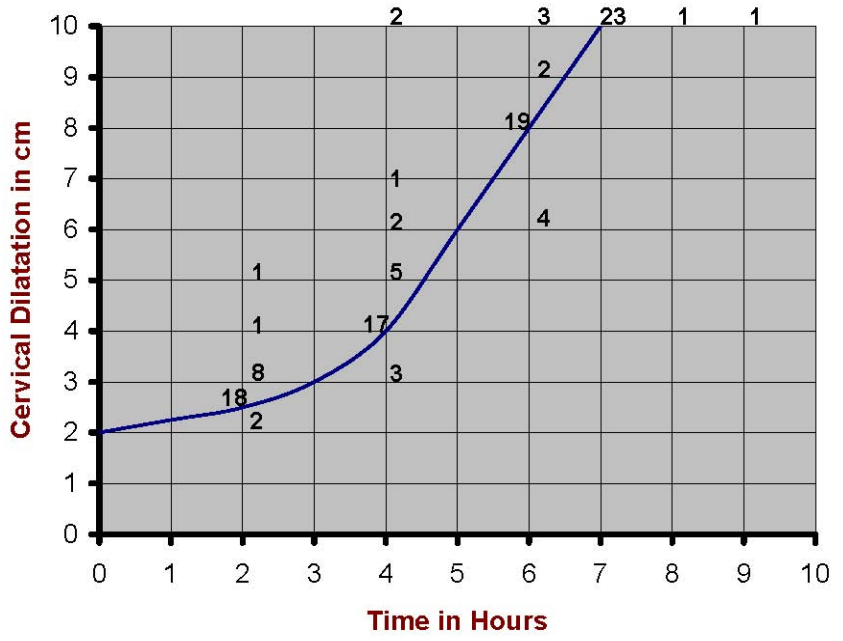
Table 13: Rates of Dilatation

Initial Cervical Dilatation in cm	Rate of Dilatation in cm/hr	Rate of Time taken for 1 cm Cervical dilatation in hours/cm
2	0.840	1.160
3	1.001	0.996
4	0.935	1.065
5	1.138	0.876
6	1.101	0.890
7	1.036	1.037
8	1.039	0.951
9	1	1
Mean/Standard Deviation	1.012/0.085	1.002/0.09

Table 14: Mean of time to full dilatation in hours

Initial Cervical Dilatation in cm	Mean of Time to full dilatation in hours	Standard deviation of time in hours
2	4.94	2.16
3	4.23	1.68
4	4.17	1.76
5	2.96	1.20
6	2.64	0.90
7	1.95	0.91
8	1.61	0.68
9	1.00	-

2 CM - Graph



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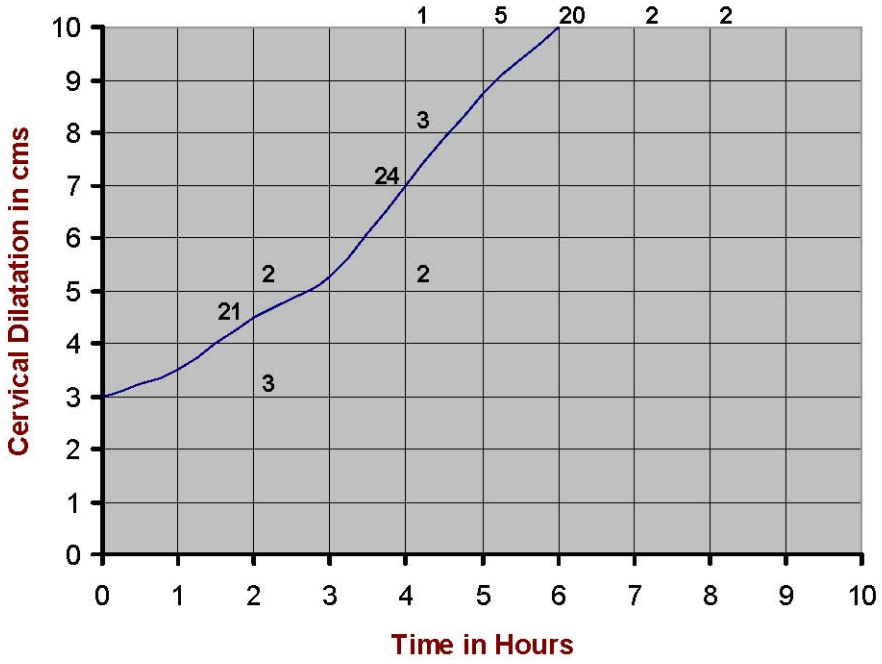

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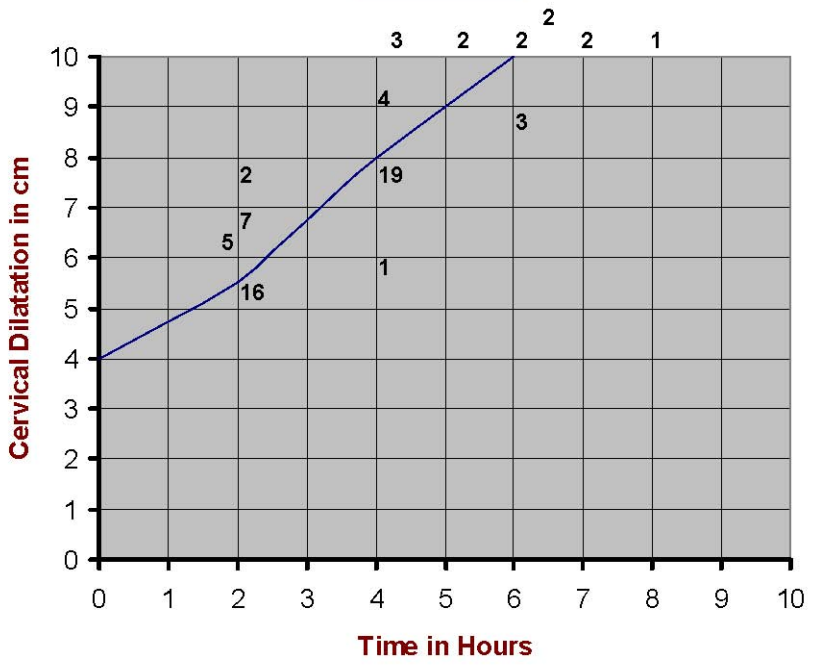

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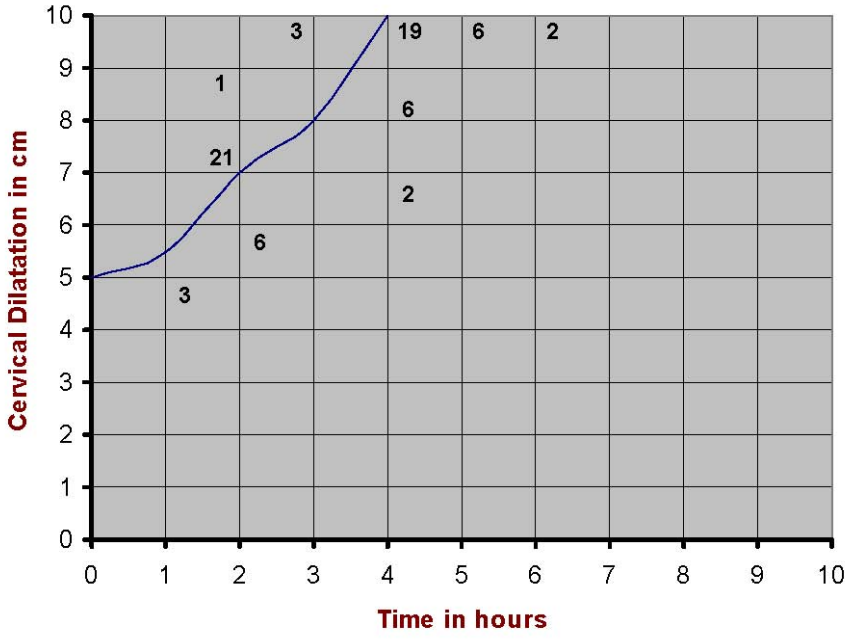

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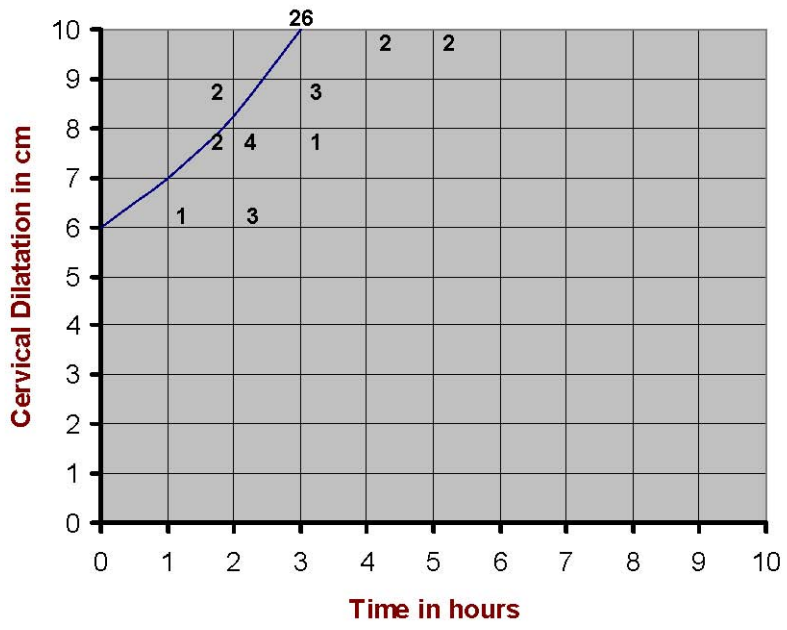
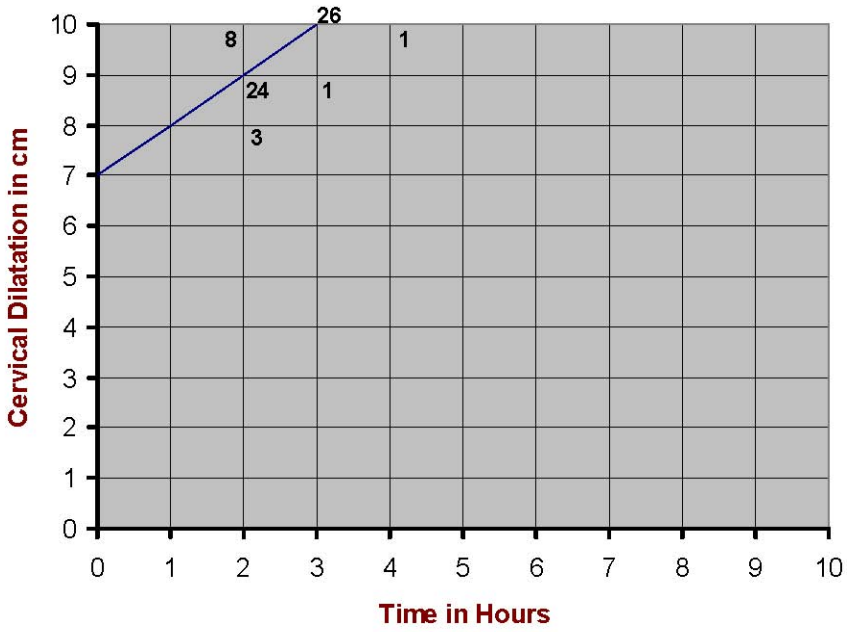
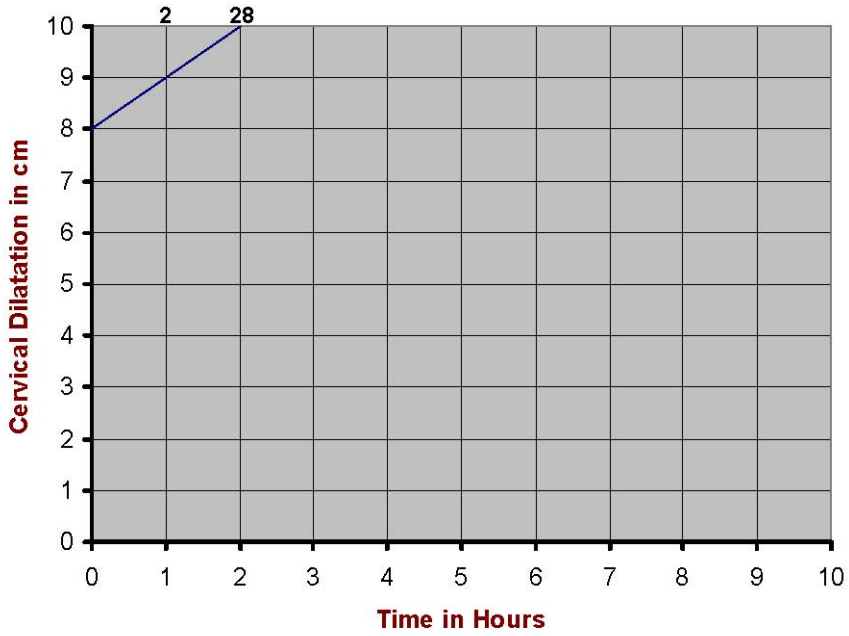


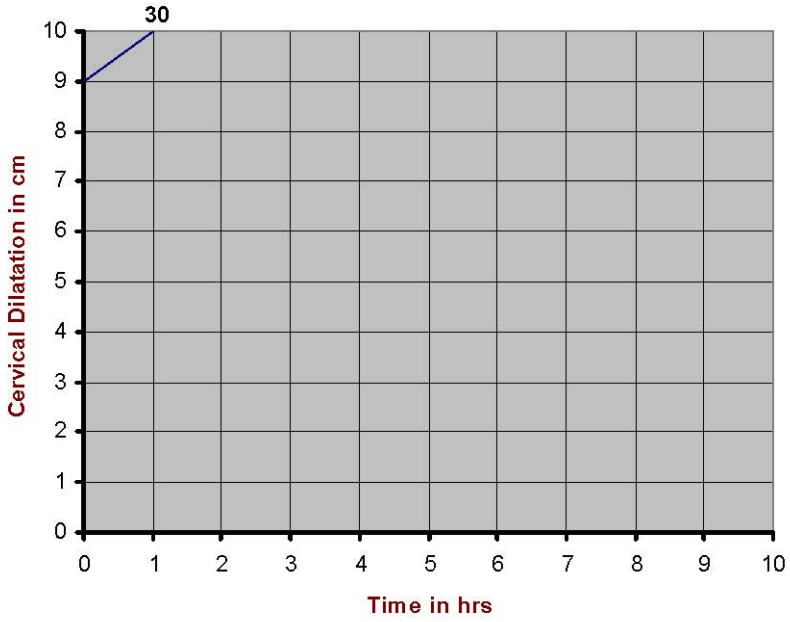
7 CM - Graph



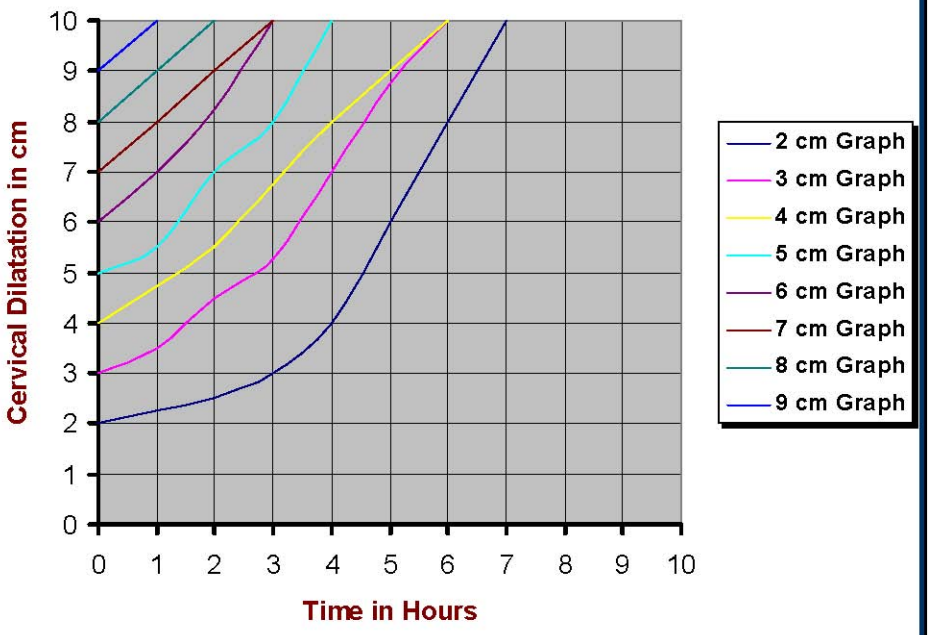
8 CM - Graph



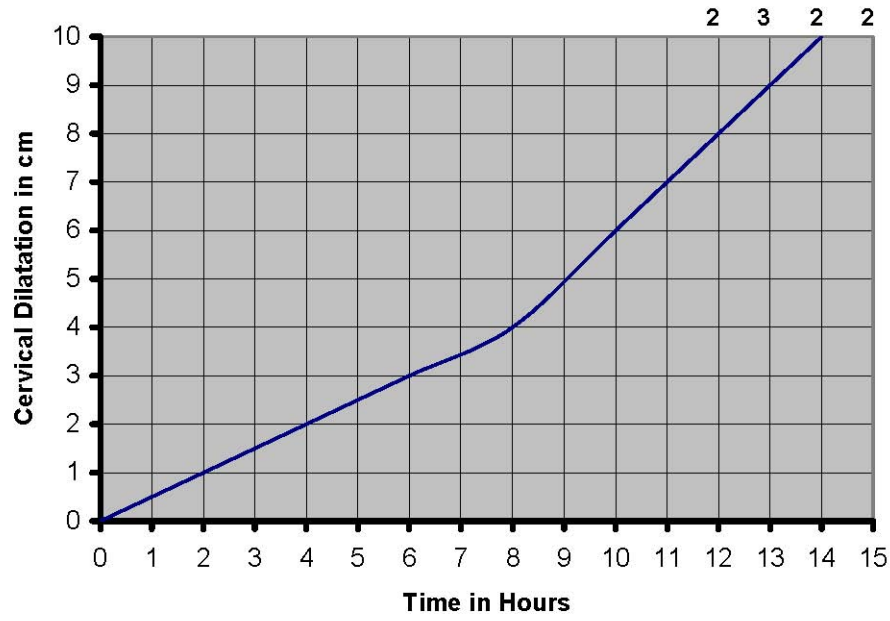
9 CM - Graph



NOMOGRAMS



Cervicograph in Augmented Labours



DISCUSSION

Child birth is the period from the onset of regular uterine contractions until expulsion of the placenta. The process by which this normally occurs is called labour (Williams)

It is a clinical diagnosis characterized by regular painful uterine contractions that increase in frequency and intensity are associated with progressive cervical effacement and dilatation (Obst. Cl. Of North America 32-2005).

This may end spontaneously or may require aids to be completed when a full term foetus presenting by vertex is expelled by natural efforts, unaided with in a period of 24 hours the term "Normal Labour" is used to designate the condition.

Abnormalities of the first and second stages of labour refer for the most part to abnormal progression of labour. Abnormal labour progress includes the clinical terms of DYSTOCIA "Slow Progress in Labour", "Dysfunctional Labour". "Failure to progress" and "cephalopelvic disproportion".

Failure to progress is a more general term that refers to both the absence of progressive cervical dialatation or progressive fetal descent. In the U.S dystocia is the most common indication for primary caesarean delivery (caesarean delivery) and account for as many as 68% of unplanned vertex caesarean delivery (Amen Ness M.D, J Goldberg M.D, Vincenzo Berghella M.D, obst. and gynae. cl. Of North America 32 (2005)[1].

Latent Phase

In 2000 Gifford et al[14], found that 24% of caesarean delivery's for lack of progress were performed in the latent phase (ACOG) and that 73% of women who had caesarean delivery before 4 cm had not exceeded

Friedman's[11] limits of prolonged latent phase. In addition the II stage of labour was not prolonged in 36% of women whose caesarean delivery was performed for dystocia of 10%.

A prolonged latent phase may be due to an unfavourable cervix at the onset of labour. It does not predict subsequent labour abnormalities or increased perinatal mortality (Friedman[11]). This was disputed by Chemlow[8] et. al. 1993 stating that they were at increased risk of other labour abnormalities, cesarean delivery, low Apgar scores, need for neonatal resuscitation and febrile morbidity and blood loss.

In our study patients with prolonged latent phase had a LSCS rate of 17% in primi and 25% in multi. Fetal outcome was good.

Latent Phase – A Comparative Study

Name of the Study	Duration in Primi (hrs)	Duration in Multi (hrs)
Friedman ideal[11]	**7.10**	**5.30**
Duignan Studd and Hughes[10] 1976	**5.6**	**3.4**
Norwitz ER Robinson JN[20] Livingstone 2001	**6.4**	**4.8**
Present Study	**6.445**	**5**

This study correlates with study of Norwitz ER Robinson JN Livingstone 2001. This is low compared to Friedman's study because Friedman's latent phase began with the onset of labour pains. But in ours it begins from the time of admission in labour ward.

Active Phase

Disorders of the active phase are common and can be seen in upto 25% of nulliparous labours and in 15% of muliparous (Sokol[24]). The most common cause of a protracted active phase in nulliparous is inadequate utrine activity, where as in multiparous it is cephalo pelvic disproportion caused by malposition (Norwitz[20] E.R, Robinson J.N, Repka J.T "Labour and Delivery 2002")

Right Occipito Poterior position can occur in 25% of cases (Caldwell and Moloy[6]). In 10% of ROP failure of rotation can occur. It may lead to deep transverse arrest. In our study deep transverse arrest occurred in 5 cases.

20% of primi had protracted active phase. It goes along with Sokol[24]'s incidence (1977) of protracted active phase of 25%. According to Sokol[24], active phase abnormalities are the commonest aberrations of labour.

20% of primi had protracted active phase. 9.6% were taken up for LSCS. 15.4% needed operative vaginal delivery. 75% of primi had labour natural. This goes along with the study conducted by Cordozo[7] et al.

Among the multi 9% had protracted active phase. 4% had LSCS 4% had operative vaginal delivery 92% had labour natural.

Among the 600 cases 88 had protracted active phase. Among them 7 delivered by LSCS. This coincide with 2% Fried man series of protracted active phase group.

12 primigravida and 3 multigravida did not have active phase as they were taken up for LSCS at the end of latent phase. Fetal outcome was uniformly good in patients with protracted active phase.

Duration of Active Phase – A Comparative Study

Name of the Study	Duration in Primi (hrs)	Duration in Multi (hrs)
Friedman[11] ideal	**4.9**	**2.2**
Norwitz ER Robinson[20] JN Livingstone 2001	**3.3**	**3.2**
Present Study	**4.27**	**2.7**

This study correlates with Friedman's study.

Second Stage of Labour

In this study 21 of primi and 9 of multi had II stage more than 1 hour. 195 of primi and 231 of multi

had II stage less than ½ hour. 3 primi gravidae with prolonged second stage were taken up for LSCS for deep transverse arrest. 2 had vacuum deliveries, 3 had outlet forceps deliveries and one had LMC forceps delivery.

Duration of Second Stage – A Comparitive Study

Name of the Study	Duration in Primi (Min)	Duration in Multi (Min)
Friedman[11] ideal	**57**	**14**
Norwitz ER Robinson[20] JN Livingstone 2001	**33**	**8.5**
Philpott[22]	**30 to 40**	**20 to 30**
Present Study	**39**	**26**

This study correlates with study by Philpott

260 of primi and 287 of multi had spontaneous vaginal delivery. 10 of primi and 2 of multi required operative vaginal delivery. 30 of primi and 12 of multi required LSCS. As this group excluded high risk pregnancies and effective monitoring was done with a partogram incidence of LSCS was low. According to WHO, Use of partograph reduced the LSCS rate from 14.4% to 8.3%. Our study also correlates with this.

As the Birth weight increases the mean duration of labour is increased. It was 11.14 hours when the baby was greater than 3.5 kg compared to 9.6 hrs when the baby was less than 3.5 kg. It was the same in multi gravida.

5% of multi and 16% of primi crossed the action line. According to WHO trial incidence of caesarean increased from 1% to 22% when the labour crossed the

action line. In the present study also the LSCS rate had increased to 27% in primi and 20% in multi.

Functional Disorders of labour

According to Friedman study the prognosis for protraction and arrest disorders had many differences. 30% with protraction disorders and 45% with arrest disorders had cephalo pelvic disproportion.

In both protraction and arrest disorders Friedman recommended fetopelvic examination to diagnose cephalo pelvic disproportion. He recommended expectant management for protraction disorders and oxytocin was advised for arrest disorders in the absence of cephalo pelvic disproportion.

Mukta Umarji (1987) had said that secondary arrest of labour was the least common labour disorder and it was associated with highest LSCS rate. In his study 2.4% had secondary arrest of dilatation and the LSCS rate was 50%. In the present study also the incidence was 3.5% and the LSCS rate was 57%.

Rate of Cervical Dilatation – A comparative study

Name of the Study	**Primi (cm/hr)**	Multi (cm/hr)
Friedman[11] ideal	**1.2**	**1.5**
Norwitz ER Robinson[20] JN Livingstone 2001	**3**	**5**
Jayashree[18] et al. 1995	**1.55**	**1.75**
Present Study	**1.012**	**2.16**

In this study the curve of normal cervical dilatation begins at zero time as the time of admission in labour. It would be possible to apply the slope of the mean acceleration phase of a number of normal labours studied, to show the expected progress of labour from a dilatation of 3 cm. The start of observation of labour, however is not at some defined time corresponding with the onset of the acceleration , but it is at zero time when the patient is first examined in labour. Women present in labour at different cervical dilatations and for those presenting at dilatation more than 3 cm. It would be inappropriate to use nomograms used for women with 3 cm dilatation at admission. Such

use would lead to an error in making a decision about the time of intervention leading to undue morbidity to mother and foetus.

Philpott's graphic records show that the two factors which have a major influence on the length of labour and mode of delivery are the patients cervimetric progress and the presence or absence of a lumbar epidural block. Philpott and Castle reported in African primigravidae, a decrease in cesarean section rate from 9.9% in 1966 to 2.6% in 1972 after the establishment of "alert and action" lines. These lines need modification as, a women who is admitted at a cervical dilatation of 5 cms or more, who subsequently develops secondary arrest will wait too long before reaching the action line.

Studd has constructed nomograms based on analysis of 176 caucasian nulliparous women. Also, Studd has shown women with cervimetric progress at dilatation of 0 to 2, 3 to 4, 5 to 6, 7 to 8 and 9 to 10, thus five slopes normal labour admitted at five different values of cervical dilatations drawn. The present study shows nomograms for each cm of cervical dilatation starting form 2 cm to 9 cm so that the appropriate stencil is used to draw the relevant pencil line of expected progress on the patients cervicograph. Error due to drawing a single line for a range of cervical dilatations at admissions is eliminated.

Multiparous patients can also be monitored by using these nomograms as primigravidae have slower progress than multiparas and so dysfunctional labour can be detected easily. Going by the faster cervical dilatation rate in multiparas, intervention by standard nomograms would be delayed.

Partogram is of great value when labour is abnormal, particularly in the evaluation and diagnosis of cephalo pelvic disproportion (Studd[25] et al) cephalo pelvic disproportion is a confused area, as the standard definition are poor and the diagnosis still used too frequently and incorrectly in order to justify a caesarean section. The traditional definition relating to the size of the baby or the size and shape of the pelvis is not helpful as cephalo pelvic disproportion is a functional diagnosis related to the efficiency of labour rather than a diagnosis based upon centimeters or kilograms. It is possible to diagnose cephalo pelvic disproportion only by a trial of labour (Cardozo[7] and Gibb 1982)

“Failure to Progress” in labour was previously used to include lack of progressive cervix dilatation and lacks of descent. According to ACOG (1995a) neither failure to progress nor cephalo pelvic disproportion are precise term. They classified labour abnormalities into either slower than normal (protraction disorder) or complete cessation of progress (arrest disorder). The women must be in the active phase of labour (cervix 3-4 cm or more) to diagnose either of these disorders.

ACOG (1995a) Criteria of Abnormal Labour

Labour Pattern	Nullipara	Multipara
Protraction disorder		
Dilatation	<1.2 cm/hr	<1.5 cm/hr
Descent	<1 cm/hr	<2 cm/hr
Arrest disorder		
No dilatation	>2 hrs	>2 hrs
No descent	> 1 hr	>1 hr

SUMMARY

- 300 primi gravidae and 300 multi gravidae were included in the study.
- The mean latent phase was 6.45 hours in primi and 5.01 hours in multi
- The mean active phase was 3.9 hours in primi and 2.7 hours in multi
- The mean duration of first stage of labour was 10.3 hours in primi and 7.14 hours in multi
- The total duration of labour was 10.5 hours in primi and 7.4 hours in multi
- The mean rate of cervical dilatation was 1.012 cm in primi and 2.16 cm in multi
- 260 primi gravidae delivered via labour naturale, 10 had operative vaginal deliveries and 30 had LSCS
- 287 multi gravidae delivered via labour naturale, 1 had operative vaginal deliveries and 12 had LSCS
- The mean birth weight was 2.7 kg in primi and 2.9 kg in multi
- The APGAR scores were good

CONCLUSION

In the majority of cases labour is a normal process which will progress satisfactorily if allowed to do so without intervention. But, patients with delayed first stage will require augmentation.

Graphical documentation of labour with partograms and evaluation with reference to nomograms of cervical dilatation will help in selecting the patients for augmentation.

Partogram is a simple and inexpensive tool to provide continuous pictorial overview of labour. This study shows that it helps in early detection of prolonged and dysfunctional labours. Thereby effective and timely intervention can be made and thus reducing unnecessary caesarean section while not adversely affecting the perinatal mortality rate.

It can be used as a tool for recording observation, clinical significance with the objective of reducing lengthy note taking. The hand over rounds from one doctor to another and one mid wife to another becomes easy because of "at a glance" view of labour progress. The clarity of information of partogram simplifies data collection and encourages research into the dynamics of labour.

Partogram is very useful in the hands of paramedical workers conducting deliveries in the outskirts of this country. Where no electronic gadgets are available to monitor and indicates abnormal labour. Thus it goes a long way in detecting abnormal labour and aid in early referral thus reducing maternal morbidity and mortality.

BIBLIOGRAPHY

1. Amen Ness M.D, J Goldberg M.D, Vincenzo Berghella M.D-2005, "Abnormalities of the first and second stages of labour", Obst. and Gynae. cl. Of North America 32 (2005).

2. Arulkumaran.S. Gibb-DM-1991, "The effect of parity on uterine activity in labour" Br.J-01 Obst and Gynaecol, Sept 91 (9) 843-8.

3. Arulkumaran.S. Chua S, Ratnam.S-1991, "Uterine activity in dysfunctional labor and target uterine activity to be aimed at with oxytocin titration", Asia, Oceania J.Obst & Gynaec.1991, 17:101-6.

4. Arulkumaran.S, Ratnam S.S, Bhaskar Rao.K-1996, "The management of labour", Chap 2, 1996 21-40.

5. Brindley BA, Sokol.R.J-1998, "Induction and Augmentation of labor: Basis and methods of comment practice", Obstet and Gynaecol survey-1998, 43:730.

6. Caldwell WE Moloy HC, D'Espo D.A-1934, "A Roentgenology study of the mechanism of engagement of the fetal head", Am. J. Obstet. Gynaecol 28:824, 1934.

7. Cardozo L.D, D.M.F.Gibb, J.W.W.Studd, R.V.Vasant, D.J.Cooper-1982, "Predictive value of cervimetric labor patterns in primigravidae" .Br.J. Obst. And Gynaecol 89:33-38.

8. Chelmow D, Kilpatrick S.J, Laros R.K Jr-1993, "Maternal and neonatal outcomes after prolonged latent phase.", Obstet. Gynaecol 81:486, 1993.
9. Chua.S, A.Kurup, S.Arulkumaran, S.S.Ratnam-1990, "Augmentation of labor 1990-Does internal tocograph result in better obstetric outcome than external tocography", Obstet.and Gynaecol, 76:164-67.

10. Duignan N.M, J.W.W.Studd, A.O.Hughes-1975, "Charactertics of labor in different racial groups", Br.J Obstet. And Gynaecol 82:593-607.

11. Friedman E.A-1954, “The graphic analysis of labour”, AM. J. Obstet and Gynaecol 68:1568-75.

12. Friedman E.A-1972, “An objective approach to the diagnosis and management of abnormal labour”, Bull NY Acad Med, 48:842, 1972.

13. Gibb DMF, S.Arulkumaran, K.C.Lun, S.S.Rathnam-1984, “Characteristics of Uterine activity in nulliparous labour”, Br. J. Obst. & Gynaecol, 91:220-27.

14. Gifford DS, Morton SC, Fiske M, et. al-2000, “Lack of progress as a reason for cesarean”, Obst. Gynaecol. 95:589, 2000.

15. Henricks CH. WE.Brenner, G.Kraus-1970, “Normal cervical dilatation patterns in late pregnancy and labour”, Am. J. Obst. And Gynaecol, 106:1065-82.

16. Ilancheran A, SM.Lim, S.S.Ratnam-1977, “Nomograms of Cervical dilatation in labour”, Sing. J. Obst. & Gynaecol., 8:69-73.

17. Kilpatrick SJ, Lanos RK, Jr-1989, “Charactertics of normal labour”, Obstet. and Gynaecol.74:85 1989.

18. Jayashree Khara, Manju Gita-1998, “Comparatives study of cervical partogram in normal and induced labor”, FOGSI, June 1998, Vol xxxv 440-3.

19. John B.Liao,M.D, Catalen S, Buhimschi,M.D, Errol R, Norwitz M.D., Ph.D-2005“Normal labor: Mechanism and Duration”, Obst..and Gynaecol clin N AM 32[2005]145-164.

20. Norwitz E.R, Robinson J.N, Repke Jt-2001, “Labour & delivery” in Gabbe S.G, Niebye J.R, Simpson J.L, Editors:Obst. normal and problem pregnancies, 4th edtion, New York, Churchill-Livingstone:, 2001 P353-400.

21. O’Driscoll K, Foley M, Macdonald D-1984, “Active management of labor as an alternative to caesarean section for dystocia”, Obstet and Gynaecol, 63:485,1984.

22. Philpott R.H-1972, ”Graphic records in labor”, BMJ 1.V. 163-65.

23. Rouse DJ, Owen.J, Hauth.J.C-1999, “Active phase labour arrest: Oxytocin augmentation for at least 4 hours”, Obst. And Gynaecol. 93:323, 1999.

24. Sokol R.J, Stojkov J, Chik L, et. al.-1977, “Normal and abnormal labor progress: I A Quantitative assessment and survey of the literature”, J. Reprod. Med. 18:47, 1947.

25. Studd J.W.W.-1973, “Partograms and Nomograms in the management.of Primigravid Labor”, 1973, Br Med JIV 451-55.

26. WHO-1994, “Maternal health & safe motherhood programme”.

27. WHO-1994, “Partograph in management of labor”, Lancet 343:1399-1401.

28. The UK Amniotomy Group-1994, “A multi centre randomized trial of amniotomy in spontaneous first labour”.

PROFORMA

Name:
Age:
IP No.:
Address:

Occupation:
Socio Economic Class:
Booked/Unbooked:
Immunisation:
Obstetrics History:
LMP:
EDD:
Date of Admission:
Complaints if any:
Past History:
Marital History:
Clinical Examination:
Height: General Examination
Weight:
Breasts and Thyroid
Spine and Gait
Abdominal Examination:

Per Veginal Examination:
Duration of Latent Phase:
ARM:
Syntocinon:
Duration of Active Phase:
Duration of II Stage:
Mode of Delivery:
Date and Time:
Details of the Baby:
Sex:
Weight:
Apgar: One Minute 5 Minutes

Duration of Third Stage:
Any Complications:
Conditional Discharg:

ABBREVIATIONS

A1 - APGAR 1 Minute
A5 - APGAR 5 Minute
ACOG - American College of Obstetricians and Gynaecologists
AP - Active Phase
ARM - Artificial Rupture of Membranes
BW - Birth Weight
Comp – Complication
G – Gravida
IP No. - Inpatient Number
LN - Labour Natural
LP - Latent Phase
LSCS - Lower Segment Caesarean Section
OF - Outlet Forceps
PAP - Protracted Active Phase
PLP - Prolonged Latent Phase
RCD - rate of cervical Dilatation
VAC - Vaccum Delivery
WHO - world Health Organization
ICD- Initial Cervical Dilatation

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT	
	Sujatha	20	8320	2	5.00	3.00	8.00	30	8.30	2.33	-	-	LN	2.50	
	Ganga	27	8407	3	3.00	2.00	5.00	20	5.20	3.50	-	-	LN	2.10	
	Selvi	24	8409	2	4.00	3.00	8.00				-	-	LSCS	3.00	
	Kalairasi	30	8778	2	2.30	1.30	4.00	10	4.10	5.38	-	-	LN	2.50	
	Jasminbee	27	8444	2	3.00	1.30	4.30	30	5.60	5.38	-	-	LN	2.90	
	Durga	21	8472	3	2.45	1.15	5.00	20	5.20	6.09	-	-	LN	3.25	
	Manjula	21	8458	3	3.00	1.30	4.30	10	4.40	5.38	-	-	LN	3.00	
	Indira	25	8536	2	9.00						-	-	LSCS	3.50	
	Tamilarasi	23	8649	2	5.00	3.00	8.00	30	8.30	2.33	+	+	LN	3.00	
	Vijaya Laksmi	21	8652	2	5.30	2.30	7.00	20	7.20	3.04	-	-	LN	2.20	
	Narmadha	20	8670	2	4.30	2.00	6.30	10	6.40	3.50	-	-	LN	2.80	
	Vanitha	24	8633	2	3.30	2.30	5.00	20	5.20	3.04	+	-	LN	2.90	
	Nirmala	22	8670	3	4.15	2.15	6.30	30	7.00	3.26	-	-	LN	2.80	
	Vimala	25	8740	3	3.00	1.30	4.30	20	4.50	5.38	-	-	LN	2.50	
	Sivagami	31	8825	4	2.00	1.30	3.30	20	3.50	5.38	-	-	LN	2.60	
	Kokila	24	8776	2	2.30	2.00	4.30	25	4.55	3.50	-	-	LN	3.50	
	Veena	28	8749	2	3.00	1.15	4.15	30	4.45	6.09	-	-	LN	2.90	
	Lakhsmi	28	8742	2	4.30	2.15	6.45	20	7.05	3.26	-	-	LN	3.20	
	Sumathi	24	8851	3	2.30	1.30	4.00	30	4.30	5.38	-	-	LN	3.00	
	Ajira	22	9007	2	2.45	1.15	4.00	20	4.20	6.09	-	-	LN	3.20	
	Renuka	25	9051	3	1.30	1.15	3.45	30	4.15	6.09	-	-	LN	2.50	
	Shenbakam	26	9042	2	3.30	2.30	6.00	20	6.20	3.04	-	+	LN	3.40	
	Kala	26	9176	2	4.30	2.15	6.45	10	6.55	3.26	-	-	LN	3.00	
	Irudhayamary	25	9226	2	3.30	2.30	6.00	20	6.20	3.04	-	-	LN	3.25	
	Nallammal	21	9313	2	4.30	1.30	6.00	25	6.25	5.38	-	-	LN	2.70	
	Chitra	21	9469	2	3.30	1.40	5.10	20	5.30	5.00	-	-	LN	3.00	
	Sasikala	24	9457	2	3.30	2.90	6.00	25	6.25	2.41	-	-	LN	2.10	
	Nadhiya	21	9544	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	1.30	
	Anjali	23	9525	2	3.00	2.30	5.30	25	5.55	3.04	-	-	LN	2.30	
	Anandhi	24	9536	4	2.00	1.30	3.30	30	4.00	5.38	-	-	LN	3.40	
	Kumudha	24	9634	2	2.30	2.00	4.30	20	4.50	3.50	-	-	LN	2.40	
	Vasantha	26	9641	2	3.00	2.00	5.00	25	5.25	3.50	-	-	LN	2.80	
	Arthi	22	9243	2	2.30	1.15	3.45	30	4.15	6.09	-	-	LN	2.99	
	Gulsar	29	9246	2	2.00	2.00	4.00	30	4.30	3.50	-	-	LN	3.20	

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT	
35	Soundarya	21	9638	2	3.20	3.00	6.00	20	6.50	2.33	-	-	LN	2.50	
36	Alamelu	26	9623	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.70	
37	Prabhavathi	30	9642	2	5.00	2.30	7.30	10	7.40		+	-	LSCS	3.30	
38	Jaya	26	9834	3	5.00	3.00	8.00	35	8.35	2.33	-	-	LN	3.75	
39	Shantha	24	9821	2	6.00	6.00	12.00	45	12.45	1.17	+	+	LN	3.20	
40	Selvarani	23	9816	2	3.00	2.00	5.00	10	5.10	3.50	-	-	LN	2.30	
41	Uma	23	9826	2	4.00	1.00	5.00	45	5.45	7.00	-	-	LN	2.50	
42	Bhavani	21	9840	2	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	2.50	
43	Vanitha	25	9828	2	4.00	2.15	6.15	30	6.45	3.26	-	-	LN	2.50	

44	Santhosam	24	9842	2	3.30	2.30	6.00	20	6.20	3.04	-	-	LN	2.40
45	Malathi	24	9852	2	5.30	1.15	6.45	30	7.15	6.09	-	-	LN	3.40
46	Mallika	29	9918	3	2.00	1.30	3.30	20	3.50	5.38	-	-	LN	2.75
47	Kavitha	24	9924	2	9.00	2.00	11.00	50	11.50	3.50	-	-	LN	3.40
48	Radha	26	9931	2	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	3.00
49	Maragatham	24	10133	3	3.30	2.00	5.30	10	5.40	3.50	-	-	LN	3.00
50	Ambiga	25	10263	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.50
51	Sarala	24	10270	2	5.00	1.30	6.30	10	6.40	5.38	-	-	LN	2.80
52	Kalyani	23	10846	2	4.00	2.30	6.30	20	6.50	3.04	-	-	LN	2.80
53	Mahalakhsmi	24	10870	2	8.30						-	-	LN	2.80
54	Ayusha	40	11142	5	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	3.25
55	Rajalakhsmi	25	11388	2	3.30	1.30	5.00	30	5.30	5.38	-	-	LN	3.10
56	Alamelu	28	11379	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.75
57	Shanmugavalli	28	11356	2	4.15	2.15	6.30	10	6.40	3.26	-	-	LN	2.90
58	Vijaya	31	11349	2	3.30	2.30	6.00	20	6.20	3.04	-	-	LN	3.40
59	Deepa	24	11578	2	9.00	2.00	11.30	20	11.40	3.50	-	-	LN	3.25
60	Sathya	19	11700	2	3.30	1.30	5.00	30	5.20	5.38	-	-	LN	2.70
61	Deepa	19	11742	2	10.00						+	-	LSCS	3.30
62	Vijaya	22	11712	2	3.30	2.30	6.00	20	6.20	3.04	-	-	LN	2.75
63	Meena	22	11748	2	4.30	2.15	6.45	20	7.10	3.26	-	-	LN	2.75
64	Sasikala	23	12073	2	3.30	2.30	6.00	30	6.30	3.04	-	-	LN	1.75
65	Uma Devi	22	12200	2	4.30	3.30	8.00	20	8.20	2.12	-	-	LN	2.50
66	Devi	30	12250	2	5.30	2.30	8.00	10	8.10	3.04	-	-	LN	3.00
67	Amudha	29	12247	2	3.30	2.30	6.00	30	6.30		+	-	LSCS	3.20
68	Nalini	22	12370	2	5.00	2.30	7.30	20	7.50	3.04	-	-	LN	2.75

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT
69	Fathima	31	12904	2	6.00	9.30	15.30	20	15.50	0.75	+	+	LN	3.50
70	Tamil Selvi	23	12629	2	5.00	1.30	6.30	20	6.50	5.38	-	-	LN	2.25
71	Amaravathi	29	12635	2	9.00	3.00	12.00	30	12.30	2.33	-	-	LN	3.20
72	Panjali	23	12391	3	6.00	2.30	8.30	30	9.00	3.04	-	-	LN	2.80
73	Padma	37	12710	2	7.00	3.00	10.00	20	10.20	2.33	-	-	LN	2.25
74	Mangala	26	14183	2	6.00	3.00	9.00	30	9.30	2.33	-	-	LN	3.00
75	Sumathi	22	14207	2	5.30	2.30	8.00	20	8.20	3.04	-	-	LN	2.90
76	Muniyammal	35	14212	4	4.30	3.00	7.30	30	8.00	2.33	-	-	LN	3.50
77	Seetha	34	14208	2	5.00	1.50	6.50	30	7.00	4.67	-	-	LN	2.90
78	Triveni	22	14186	2	6.00	2.30	8.30	20	8.50	3.04	-	-	LN	2.30
79	Manjula	24	14676	2	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	3.80
80	Marammal	27	14470	3	5.00	2.30	7.30	20	7.50	3.04	-	-	LN	2.50
81	Carolin	31	14958	2	6.00	2.30	8.30	10	8.40	3.04	-	-	LN	3.25
82	Lordumari	29	14382	5	5.30	2.15	6.45	15	7.00	3.26	-	-	LN	2.50
83	Kavitha	28	14424	2	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	3.20
84	Kanchana	25	14362	3	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.95
85	Udhayarani	21	17473	2	6.00	1.00	7.00	45	7.45	7.00	-	-	LN	2.60
86	Dava Selvi	26	16415	2	9.00						-	-	LSCS	4.20
87	Nandhini	28	16876	3	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.50
88	Sarasvathi	29	16819	2	4.00	1.30	5.30	20	5.50	5.38	-	-	LN	2.75
89	Jayanthi	29	17297	2	5.00	9.00	14.00				+	+	LSCS	3.25

90	Amudha	29	16174	3	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	3.50
91	Naga Mani	20	16166	3	5.00	1.00	6.00	30	6.30	7.00	-	-	LN	3.60
92	Rajeshwari	27	17106	3	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	3.10
93	Devi	26	16543	2	5.00	1.30	6.30	70	6.50	5.38	-	-	LN	2.60
94	Sudha	21	16750	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	2.50
95	Vijaya	28	16786	2	5.15	2.30	5.45	15	6.00	3.04	-	-	LN	3.03
96	Sheela	25	16806	2	9.00	4.00	13.00	45	13.45	1.75	-	-	LN	2.40
97	Sumathi	25	16752	2	6.00	4.00	10.00	20	10.20	1.75	-	-	LN	3.00
98	Poongodi	26	16890	2	5.00	3.00	8.00	30	8.30	2.33	-	-	LN	2.75
99	Geetha	33	16859	3	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.30
100	Prema	21	16253	2	5.00	10.00	15.00	30	15.30	0.70	+	+	LN	2.50
101	Nirmala	32	16873	2	4.00	2.30	7.00	20	7.20	3.04	-	-	LN	2.60
102	Jamuna	22	17276	3	5.00	9.00	14.00	30	14.30	0.78	+	+	LN	2.75

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT
103	Lakhsmi	23	17119	3	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	2.1(
104	Deepa	20	17179	2	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.7[
105	Eswari	31	17175	3	5.00	8.30	8.30	30	9.00	0.84	+	+	LN	1.6(
106	Vasuki	35	17173	2	3.00	2.00	5.00	15	7.15	3.50	-	-	LN	2.0(
107	Jayanthi	29	17297	2	2.00	2.30	4.30	32	5.20	3.04	-	-	LN	2.2(
108	Shanthi	24	17201	3	2.30	2.00	4.30	24	4.54	3.50	-	-	LN	3.0(
109	Vanitha	23	17391	2	2.00	2.00	4.00	20	4.20	3.50	-	-	LN	3.2(
110	Savitha	22	17324	2	2.00	3.30	4.30	45	5.15	2.12	-	-	LN	2.2[
111	Renuka	24	17326	2	2.15	1.15	3.30	30	4.00	6.09	-	-	LN	2.7(
112	Marammal	30	17438	3	4.00	1.00	5.00	20	5.20	7.00	-	-	LN	2.6(
113	Savitha	31	17447	2	3.00	0.30	3.30	40	4.10	23.33	-	-	LN	2.2[
114	Shanthi	23	17403	2	5.00	2.30	7.30	30	8.00	3.04	-	-	LN	2.5(
115	Lalitha	20	17545	3	4.00	2.30	6.30	30	7.00	3.04	-	-	LN	3.7[
116	Karpagam	29	17852	5	9.00						-	-	LSCS	2.5(
117	Nirmala	25	17862	2	8.00	4.00	12.00	30	12.30		-	-	LSCS	2.8(
118	Soundram	25	18403	3	3.00	1.00	4.00	22	4.22	7.00	-	-	LN	2.5(
119	Kokila	23	18031	2	3.00	10.00	13.00	52	13.52	0.70	+	+	LN	2.5(
120	Clara	21	18162	3	1.00	1.15	2.15	39	2.54	6.09	-	-	LN	2.7[
121	Chandra	27	18141	2	4.00	1.30	5.30	48	5.18	5.38	-	-	LN	2.7[
122	Shakila	23	18178	4	2.00	1.00	3.00	0.3	3.30		-	-	LMC	3.0(
123	Jothi	27	17184	3	3.30	1.15	4.45	15	5.00	6.09	-	-	LN	1.7[
124	Jayalakhsmi	21	17283	4	2.30	2.00	2.30	20	4.50	3.50	-	-	LN	2.1(
125	Sasikala	30	17232	4	1.30	1.00	2.30	20	2.50	7.00	-	-	LN	2.1(
126	Usha	23	17326	2	3.00	2.00	5.00	30	5.30	3.50	-	-	LN	3.0(
127	Chitra	21	17243	3	3.00	2.00	5.00	30	5.30	3.50	-	-	LN	3.0(
128	Rohini	30	17878	2	2.00	1.30	3.30	20	3.50		-	-	LSCS	2.0(
129	Kannaki	22	13477	2	6.00	2.00	8.00	45	8.45	3.50	-	-	LN	2.6(
130	Suguna	31	13356	3	10.00	4.00	14.00	30	14.30	1.75	-	-	LN	3.0(
131	Devi	23	13432	2	5.00	3.00	8.00	20	8.20	2.33	-	-	LN	3.4[
132	Shanthi	24	13529	2	4.00	1.00	5.00	30	5.30	7.00	-	-	LN	2.4(
133	Gomathi	32	13458	3	5.00	2.00	7.00	20	7.20	3.50	-	-	LN	1.5(
134	Rani	22	13550	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	1.2[
135	Parameshwari	24	13573	2	5.00	1.00	6.00	20	6.20	7.00	-	-	LN	2.9(

136	Siva Shankari	24	13583	2	6.00	1.00	7.00	20	7.20	7.00	-	-	LN	2.25

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT
137	Shakunthala	25	13578	2	5.00	11.00	16.00	30	16.30	0.64	+	+	LN	3.00
138	Radhika	25	13562	3	6.00	1.00	7.00	20	7.20	7.00	-	-	LN	2.50
139	Anitha	21	13587	2							-	-	LN	2.80
140	Sathya	20	13528	2	8.30						-	-	LN	3.25
141	Deepa	23	13585	2	6.00	2.00	8.00	30	8.30	3.50	-	-	LN	2.70
142	Prema	23	13591	2	7.00	3.00	10.00	20	10.20	2.33	-	-	LN	2.80
143	Nalini	24	13612	2	6.00	2.00	8.00	10	8.10	3.50	-	-	LN	2.60
144	Girija	24	13585	3	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	3.00
145	Ramani	26	13691	2	9.00	3.00	12.00	30	12.30	2.33	-	-	LN	2.45
146	Maheswari	29	13601	2	4.00	2.00	6.00	10	6.10	3.50	-	-	LN	3.25
147	Mohana	25	13652	3	3.00	2.00	5.00	20	5.20	3.50	-	-	LN	2.00
148	Nagavalli	32	13582	2	4.00	1.00	5.00	30	5.30	7.00	-	-	LN	3.00
149	Malar	27	13529	2	5.00	2.00	7.00	20	7.20	3.50	-	-	LN	2.75
150	Emeli	20	13462	2	4.00	1.00	5.00	30	5.30	7.00	-	-	LN	2.50
151	Rani	22	13642	2	3.00	2.00	5.00	20	5.20	3.50	-	-	LN	2.75
152	Girija	20	13582	2	4.00	1.00	5.00	30	5.30	7.00	-	-	LN	3.00
153	Rubi	19	19790	2	4.00	3.00	7.00	30	7.30	2.33	-	-	LN	3.25
154	Kalai Vani	22	13620	2	5.00	2.00	7.00	20	7.20	3.50	-	-	LN	3.00
155	Lavanya	21	13860	2	4.00	1.00	5.00	40	5.40	7.00	-	-	LN	3.00
156	Praba	24	13761	3	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	3.00
157	Fathima	25	13720	3	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	2.75
158	Valli	25	13945	2	5.00	3.00	8.00	10	8.10	2.33	-	-	LN	3.00
159	Chandra	30	13975	2	3.00	2.00	5.00	20	5.20	3.50	-	-	LN	2.25
160	Shanthi	27	13973	2	4.00	2.00	6.00	10	6.10	3.50	-	-	LN	2.75
161	Sundari	28	13940	2	5.00	1.00	6.00	20	6.20	7.00	-	-	LN	2.00
162	Ammu	27	13978	2	5.00	3.00	8.00	10	8.10	2.33	-	-	LN	3.25
163	Vasantha	26	14103	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.25
164	Anitha	24	14003	3	8.40						-	-	LN	2.75
165	Guna	25	13836	3	5.00	1.00	6.00	40	6.40	7.00	-	-	LN	3.25
166	Padma	25	14172	3	2.00	2.00	4.00	30	4.30	3.50	-	-	LN	3.00
167	Anjali	25	14127	2	3.00	2.00	5.00	10	5.10	3.50	-	-	LN	2.75
168	Manjula	22	14183	2	4.00	1.00	5.00	30	5.30	7.00	-	-	LN	2.75
169	Anuradha	22	14210	2	9.00	3.00	12.00	40	12.40	2.33	-	-	LN	3.25
170	Meena	25	14182	4	2.00	4.00	6.00	30	6.30	1.75	-	-	LN	3.00

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT
171	Geetha	22	13950	3	5.00	1.00	6.00	20	6.20	7.00	-	-	LN	2.50
172	Dhana	22	14186	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	3.00
173	Yasmin	25	15097	3	2.00	2.00	4.00	20	4.20	3.50	-	-	LN	2.75
174	Mumtaj	22	14213	2	4.00	1.00	5.00	20	5.20	7.00	-	-	LN	2.40
175	Uma	25	14275	3	2.00	3.00	5.00	10	5.10	2.33	-	-	LN	2.50
176	Anjali	24	14286	2	5.00	2.00	7.00	10	7.10	3.50	-	-	LN	2.25
177	Kala	24	14271	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.50
178	Lakhsmi	21	14270	3	4.00	3.00	7.00	30	7.30	2.33	-	-	LN	3.29
179	Kamatchi	24	14372	3	4.00	10.00	14.00	30	14.30	0.70	+	+	LN	2.25

180	Kalaivani	25	14274	2	3.00	3.00	6.00	20	6.20	2.33	-	-	LN	2.50
181	Malathi	22	14354	3	4.00	2.00	6.00	40	6.40	3.50	-	-	LN	2.75
182	Bhagya	25	14349	3	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	2.60
183	Vijaya	28	14353	5	4.00	9.00	13.00	20	13.20	0.78	+	+	LN	2.80
184	Meena	22	13672	3	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.25
185	Kokila	22	14271	2	4.00	3.00	7.00	10	7.10	2.33	-	-	LN	2.30
186	Kavitha	23	14470	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.50
187	Muniyammal	21	14678	2	3.00	3.00	6.00	30	6.30	2.33	-	-	LN	2.75
188	Malathi	24	14349	3	4.00	3.00	7.00	40	7.40	2.33	-	-	LN	3.00
189	Nazima	22	14258	5	3.00	2.00	5.00	30	5.30	3.50	-	-	LN	3.25
190	Geetha	25	14559	2	6.00	3.00	9.00	10	9.10	2.33	-	-	LN	3.50
191	Jasmin	26	14381	2	5.00	9.00	14.00	20	14.20	0.78	+	+	LN	3.00
192	Neela	24	14640	6	4.00	2.00	6.00	40	6.40	3.50	-	-	LN	2.00
193	Laxmi	22	14871	6	3.00	3.00	6.00	30	6.30	2.33	-	-	LN	3.75
194	Eswari	25	14765	5	6.00	2.00	8.00	30	8.30	3.50	-	-	LN	2.25
195	Prema	23	14584	2	4.00	2.00	6.00	10	6.10	3.50	-	-	LN	2.50
196	Kanchana	21	15984	2	5.00	2.00	7.00	40	7.40	3.50	-	-	LN	2.75
197	Seetha	26	14364	2	4.00	2.00	6.00	10	6.10	3.50	-	-	LN	3.00
198	Gokila	25	14981	2	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	2.00
199	Vedhavalli	24	14887	4	2.00	2.00	4.00	10	4.10	3.50	-	-	LN	1.25
200	Vimala	24	14976	3	2.00	3.00	5.00	30	5.30	2.33	-	-	LN	3.50
201	Velankanni	24	18328	2	5.00	2.00	7.00	20	7.20	3.50	-	-	LN	2.75
202	Shangitha	23	18528	2	6.00	8.00	14.00	45	14.45	0.88	+	+	LN	2.80
203	Ganga	22	18620	2	4.00	3.00	7.00	35	7.35	2.33	-	-	LN	2.50
204	Gokila	25	18878	2	3.00	2.00	5.00	30	5.30	3.50	-	-	LN	3.00

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT
205	Thamrai	21	18952	3	2.00	2.00	4.00	20	4.20	3.50	-	-	LN	2.50
206	Kamatchi	24	18978	3	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.80
207	Renuka	26	18599	3	8.00	2.00	10.00	30	10.30	3.50	-	-	LN	3.25
208	Rani	21	18659	4	6.00	10.00	16.00	30	16.30	0.70	+	+	LN	3.50
209	Vanitha	23	18171	2	7.00	3.00	10.00	20	10.20	2.33	-	-	LN	3.75
210	Asha	22	18331	2	3.00	2.00	5.00	40	5.40	3.50	-	-	LN	2.50
211	Deepa	25	18582	2	4.00	2.00	6.00	50	6.50	3.50	-	-	LN	2.75
212	Renuka	22	18545	3	5.00	9.00	14.00	30	14.30	0.78	+	+	LN	2.00
213	Seetha	23	18861	2	6.00	3.00	9.00	35	9.35	2.33	-	-	LN	1.50
214	Fathima	23	18781	2	4.00	10.00	14.00	40	14.40	0.70	+	+	LN	1.90
215	Sulthana	24	18563	3	6.00	3.00	9.00	35	9.35	2.33	-	-	LN	2.20
216	Vinodhini	21	18552	3	5.00	2.00	7.00	40	7.40	3.50	-	-	LN	2.00
217	Suganthi	26	18678	3	4.00	3.00	7.00	35	7.35	2.33	-	-	LN	2.50
218	Priya	23	18876	3	6.00	3.00	9.00	30	9.30	2.33	-	-	LN	2.75
219	Arthi	25	18954	2	4.00	2.00	6.00	45	6.45	3.50	-	-	LN	2.25
220	Ramya	21	21346	2	7.00	3.00	10.00	30	10.30	2.33	-	-	LN	3.50
221	Kanchana	26	21658	3	3.00	9.00	12.00	40	12.40	0.78	+	+	LN	3.25
222	Renuka	22	21265	3	4.00	2.00	6.00	25	6.25	3.50	-	-	LN	2.50
223	Gokila	23	21248	2	7.00	2.00	9.00	45	9.45	3.50	-	-	LN	2.25
224	Shyamala	24	21248	2	6.00	4.00	10.00	35	10.35	1.75	-	-	LN	2.75
225	Parameshwari	25	21267	2	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	3.25

226	Parveen Banu	24	21231	3	7.00	3.00	10.00	30	10.30	2.33	-	-	LN	2.80
227	Gomathi	23	21482	3	6.00	2.00	8.00	45	8.45	3.50	-	-	LN	2.90
228	Bhuvana	25	21486	2	7.00	8.00	15.00	30	15.30	0.88	+	+	LN	3.75
229	Jaya Lakhsmi	26	21591	2	5.00	2.00	7.00	20	7.20	3.50	-	-	LN	2.50
230	Bala Mani	21	21592	2	4.00	3.00	7.00	15	7.15	2.33	-	-	LN	1.75
231	Deepa	22	21852	2	4.00	2.00	6.00	25	6.25	3.50	-	-	LN	2.20
232	Lalitha	24	21258	3	4.00	3.00	7.00	30	7.30		-	-		2.75
233	Kavitha	25	21256	2	5.00	3.00	8.00	20	8.20	2.33	-	-	LN	3.00
234	Priya	23	21346	2	6.00	3.00	9.00	25	9.25	2.33	-	-	LN	2.50
235	Niranjana	21	21468	2	7.00	4.00	11.00	30	11.30	1.75	-	-	LN	3.50
236	Dhamayanthi	22	21407	2	4.00	2.00	6.00	40	6.40		-	-		3.50
237	Dhana	23	21339	4	6.00	9.00	15.00	35	15.35	0.78	+	+	LN	1.75
238	Aruna	23	20834	2	3.00	5.00	8.00	40	8.40	1.40	-	-	LN	2.25

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT
239	Chandra	26	21069	2	6.00	2.00	8.00	25	8.25	3.50	-	-	LN	2.75
240	Deepa	21	21153	3	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.50
241	Bhuvana	24	21030	2	4.00	2.00	6.00	25	6.25	3.50	-	-	LN	2.00
242	Sudha	22	20165	2	5.00	3.00	8.00	30	8.30	2.33	-	-	LN	1.75
243	Sri Devi	25	21328	2	6.00	2.00	8.00	15	8.15	3.50	-	-	LN	3.25
244	Maragatha	26	21396	3	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	2.50
245	Malar	26	21324	2	4.00	3.00	7.00	35	7.35	2.33	-	-	LN	3.75
246	Manjula	21	21333	2	7.00	2.00	9.00	40	9.40	3.50	-	-	LN	2.25
247	Jothi	23	21384	4	6.00	10.00	16.00	15	16.15	0.70	+	+	LN	3.50
248	Jamuna	25	21337	3	4.00	2.00	6.00	20	6.20	3.50	-	-	LN	3.25
249	Devika	26	21262	2	7.00	3.00	10.00	40	10.40	2.33	+	+	LN	2.00
250	Mangaiyarkarasi	24	21338	3	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	2.50
251	Kannaki	25	21069	2	5.00	2.00	7.00	20	7.20	3.50	-	-	LN	2.25
252	Kanmani	23	21348	3	4.00	3.00	7.00	35	7.35	2.33	-	+	LN	2.75
253	Kamatchi	24	30834	2	4.00	2.00	6.00	40	6.40	3.50	-	-	LN	3.00
254	Neela	21	21835	2	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	3.25
255	Sumitha	22	21405	2	5.00	9.00	14.00	35	14.35	0.78	+	+	LN	3.75
256	Veera	22	21437	3	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	3.25
257	Banu	25	21751	3	6.00	3.00	9.00	25	9.25	2.33	+	-	LN	3.00
258	Laxmi	24	21481	2	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.25
259	Mohana	23	21423	2	4.00	2.00	6.00	40	6.40	3.50	-	-	LN	2.75
260	Angel	23	21393	2	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	2.00
261	Ajantha	26	21454	4	4.00	3.00	7.00	35	7.35	2.33	-	-	LN	3.00
262	Usha	24	21490	3	5.00	2.00	7.00	15	7.15	3.50	-	-	LN	2.00
263	Muthu Lakhsmi	21	21499	2	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	1.75
264	Jeenath	25	21312	2	7.00	3.00	10.00	35	10.35	2.33	-	-	LN	2.25
265	Saraswathi	21	21103	4	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	2.75
266	Malar Vizhi	22	21315	3	6.00	4.00	10.00	20	10.20	1.75	-	-	LN	2.25
267	Shantha	24	21346	2	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	2.00
268	Adhi Laxmi	25	20899	2	4.00	3.00	7.00	25	7.25	2.33	-	-	LN	3.25
269	Selva Mani	26	20846	2	3.00	2.00	5.00	40	5.40	3.50	-	-	LN	3.75
270	Sheeba	23	21368	2	6.00	3.00	9.00	30	9.30	2.33	-	+	LN	3.50
271	Prema	21	21394	3	7.00	2.00	9.00	25	9.25	3.50	-	-	LN	2.75

272	Geetha	22	21386	4	6.00	2.00	8.00	20	8.20	3.50	-	-	LN	2.25	

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BW	
273	Chitra	23	21875	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	2.(	
274	Nandhini	25	21878	2	3.00	3.00	6.00	40	6.40	2.33	+	-	LN	2.7	
275	Marathal	24	21854	2	9.00	3.00	12.00	20	12.20	2.33	-	-	LN	3.3	
276	Prabavathi	26	21855	3	2.00	2.00	4.00	30	4.30	3.50	-	-	LN	2.(	
277	Veena	24	21898	2	5.00	2.00	7.00	25	7.25	3.50	-	-	LN	2.5	
278	Usha	21	20865	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	1.7	
279	Sathya	23	20896	4	4.00	3.00	7.00	25	7.25	2.33	-	-	LN	2.3	
280	Kannammal	25	20898	3	5.00	2.00	7.00	30	7.30	3.50	-	-	LN	3.(	
281	Govindhammal	21	21396	3	4.00	2.00	6.00	15	6.15	3.50	-	-	LN	2.7	
282	Manjula	22	21384	2	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	3.5	
283	Anuradha	22	21481	2	5.00	2.00	7.00	35	7.35	3.50	-	-	LN	3.3	
284	Devi	23	21454	2	4.00	2.00	6.00	40	6.40	3.50	-	-	LN	2.7	
285	Eswari	23	21364	3	4.00	3.00	7.00	20	7.20	2.33	+	-	LN	3.5	
286	Parvathi	21	21333	2	6.00	3.00	9.00	20	9.20	2.33	+	-	LN	2.7	
287	Sheela	24	21250	2	9.00	2.00	11.00	20	11.20	3.50	-	-	LN	3.3	
288	Manjula	26	21206	2	4.00	2.00	6.00	30	6.30	3.50	-	-	LN	1.7	
289	Mani	25	21116	4	5.00	3.00	8.00	40	8.40	2.33	+	+	LN	2.3	
290	Ponnalmmal	25	21108	2	2.00	2.00	4.00	35	4.35	3.50	-	-	LN	2.5	
291	Selvi	24	21114	2	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	3.3	
292	Rekha	23	21008	3	3.00						-	-	LSCS	4.	
293	Jothi	26	21019	2	5.00	2.00	7.00				-	-	LSCS	2.7	
294	Baby	25	21065	2	6.00	3.00	9.00	30	9.30	2.33	-	-	LN	2.(	
295	Prema	26	21209	4	4.00	3.00	7.00	20	7.20	2.33	-	-	LN	3.5	
296	Malar Kodi	24	21454	2	6.00	2.00	8.00	25	8.25	3.50	-	-	LN	2.5	
297	Pankajam	25	21342	3	2.00	5.00	7.00	30	7.30	1.40	+	+	LN	2.7	
298	Sujithra	23	21311	2	5.00	4.00	9.00	20	3.20	1.75	+	+	LN	3.3	
299	Mani	26	21116	2	2.00	3.00	5.00	40	5.40	2.33	-	-	LN	3.7	
300	Rajeshwari	25	21132	3	5.00	3.00	8.00	30	8.30	2.33	-	-	LN	2.5	

	RCD - rate of cervical Dilatation		VAC - Vaccum Delivery		G - Gravida
	PLP - Prolonged Latent Phase		BW - Birth Weight		LP - Latent
	PAP - Protracted Active Phase		A1 - APGAR 1 Minute		AP - Active
	ARM - Artificial Rupture of Membranes		A5 - APGAR 5 Minute		DTA - Deep
	LN - Labour Natural		Comp - Complication		AOD - Arres

Sl. No	Name	Age	IP No.	G	LP	AP	I St	II St	Total	RCD	ARM	Synto	Mode	BWT	
	LSCS - Lower Segment Caesarean Section						Abbreviations								
	OF - Outlet Forceps						IP No. - Inpatient Number								

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1	A
	Suganya	22	8022	2	7	3.00	10.00	40	10.67	2.33	-	-	LN	1.90	8	
	Parimala	23	8294	3		6.25	6.25	50	7.09	1.01	-	-	LN	2.50	8	
	Rajini	18	8401	4		5.08	5.08	45	5.83	0.97	-	-	LN	1.75	8	
	Thamarai	25	8370	4		4.73	4.73	40	5.40	0.90	-	-	LN	2.10	8	
	Sanasritham	21	8436	6		4.16	4.16	45	4.91	1.23	+	-	LN	2.50	7	
	Sabana	22	8089	1	7		7.00		7.00		-	-	LSCS	3.70	8	
	Kumari	21	8498	2	6	4.00	10.00	45	10.75	0.71	-	-	LN	2.50	8	
	Sathya	20	8511	5		5.02	5.02	40	5.69	1.14	+	-	LN	2.00	7	
	Anbukumari	22	8575	7		2.68	2.68	50	3.51	1.17	-	-	LN	2.00	7	
	Indhumathi	20	8560	2	5		5.00		5.00		-	+	LSCS	3.50	8	
	Rakha	21	8494	2	6	5.00	11.00	90	12.50		-	+	LSCS	3.00	8	
	Saratha	19	8593	3		6.07	6.07	45	6.82	0.97	+	-	LN	2.50	7	
	Rajalakshmi	25	8560	1	5	4.00	9.00	30	9.50		-	+	LSCS	3.50	7	
	Rajaehwari	25	8591	7		2.77	2.77	50	3.60	1.20	-	-	LN	3.00	8	
	Barkatnesh	22	8637	4		5.37	5.37	40	6.04	1.01	-	-	LN	2.80	7	
	Rajathi	26	8622	4		4.56	4.56	55	5.48	0.91	-	-	LN	3.10	7	
	Seetha	28	8642	2	8	9.00	17.00	60	18.00	0.84	-	-	LN	2.50	8	
	Ambika	26	8629	5		4.82	4.82	50	5.66	1.13	-	-	LN	2.50	8	
	Deepa	21	8784	1	10	4.00	14.00	25	14.42	1.75	+	-	LN	3.25	8	
	Rajaeshwari	26	8634	4		5.39	5.39	55	6.31	1.05	-	-	Ln	2.90	8	
	Renuka	24	8636	4		5.34	5.34	50	6.18	1.03	-	-	LN	2.80	8	
	Sasikala	19	8892	5		4.96	4.96	40	5.62	1.12	-	-	LN	2.30	3	
	Aruna	21	8684	5		5.70	5.70	45	6.45	1.29	-	-	LN	2.90	7	
	Vijaya	22	8742	2	9	3.00	12.00	50	12.83	0.80	+	-	LN	3.20	8	
	Gowri	24	8735	2	12	4.00	16.00	55	16.92	1.75	+	+	LN	3.20	8	
	Murugathal	21	9025	2	8	9.00	17.00	40	17.67	0.84	-	-	LN	3.10	8	
	Dhanalakshmi	23	9099	2	7		7.00		7.00		-	-	LSCS	3.30	6	
	Devaki	25	9104	4		5.03	5.03	50	5.87	0.98	-	-	LN	2.90	4	
	Lakshmi	21	9523	4		5.16	5.16	40	5.83	0.97	-	-	LN	2.50	8	
	Tamilarsi	21	9252	1	5	4.00	9.00	25	9.42	1.75	-	+	LN	2.75	8	
	Susila	21	9262	7		2.41	2.41	70	3.57	1.19	-	-	LMC	2.50	8	
	Kalaiselvi	20	9222	1	10	5.00	15.00	60	16.00		+	+	OF	2.60	8	
	Jayla	20	9250	2	6	4.00	10.00	40	10.67	1.13	-	-	LN	2.60	7	
	Rajaeshwari	20	9303	7		2.73	2.73	40	3.40	1.13	-	-	LMC	2.60	6	

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1	A
35	Nagavali	20	9284	2	6	8.00	14.00	45	14.75	0.71	-	-	LN	2.50	8	
36	Seeladevi	21	9334	3		7.53	7.53	50	8.36	1.19	-	-	LN	2.50	8	
37	Jothi	20	9462	2	8	11.00	19.00	45	19.75	0.76	-	-	LN	2.80	8	
38	Kavithamani	22	9638	5		5.02	5.02	40	5.69	1.14	-	-	LN	2.70	7	
39	Bharathi	21	9630	2	9	4.00	13.00	45	13.75	1.75	+	+	LN	2.20	8	
40	Kavitha	26	9620	4		4.90	4.90	40	5.56	0.93	-	-	LN	1.50	7	
41	Latha	21	9562	7		1.95	1.95	30	2.45	0.82	-	-	LN	2.50	7	
42	Vijalakshmi	19	9526	5		5.19	5.19	40	5.86	1.17	-	-	LN	2.50	7	
43	Lalitha	23	9557	2	6	9.00	15.00	35	15.58	0.86	+	-	LN	2.50	7	
44	Bagya	25	9561	6		4.11	4.11	38	4.75	1.19	-	-	LN	2.60	8	

45	Chithra	21	9469	7		3.10	3.10	40	3.77	1.26	-	-	LN	3.00	8		
46	Shanthi	24	9236	9		0.08	0.08	50	0.91	0.91	-	-	LN	2.70	8		
47	Valli	31	9639	1	9	5.00	14.00	35	14.58	1.40	-	+	LN	3.40	7		
48	Lakshmi	21	9797	4		4.79	4.79	45	5.54	0.92	-	-	LN	2.50	8		
49	Bhavani	19	9912	2	7	9.00	16.00	50	16.83	0.75	-	+	LN	2.50	7		
50	Rajaseshwari	27	9928	9		0.46	0.46	42	1.16	1.16	-	-	LN	2.70	7		
51	Vanitha	25	9878	4		5.12	5.12	40	5.79	0.96	-	-	LN	2.50	7		
52	Sathya	22	10068	4		5.11	5.11	35	5.70	0.95	-	-	LN	2.50	8		
53	Kasthurbee	28	10283	5		5.33	5.33	50	6.17	1.23	-	-	LN	2.50	8		
54	Devaki	21	10279	7		4.26	4.26	42	4.96	1.65	-	-	LN	3.25	7		
55	Sathya	19	10284	1	7	9.00	16.00		16.00		-	-	LSCS	4.00	7		
56	Kalbana	23	10475	2	8	10.00	18.00		18.00		-	+	LSCS	3.50	5		
57	Indira	25	10658	4		5.08	5.08	50	5.91	0.98	-	-	LN	2.50	7		
58	Kowsalya	23	10767	4		4.61	4.61	45	5.36	0.89	-	-	LN	3.50	8		
59	Usha	19	11376	2	6	9.00	15.00	45	15.75	0.59	+	+	LN	2.75	8		
60	Viji	24	11419	5		5.31	5.31	32	5.85	1.17	-	-	LN	2.40	5		
61	Nagalakshmi	20	11384	5		5.54	5.54	45	6.29	1.26	-	-	LN	2.50	8		
62	Vimala	22	11417	1	10	4.00	14.00	50	14.83	1.75	-	+	LN	3.00	8		
63	Nagarani	20	11354	2			0.00		0.00		-	-	LSCS	3.10	7		
64	Shanthi	27	11352	4		4.66	4.66	45	5.41	0.90	-	-	LN	2.70	7		
65	Selvi	25	11361	4		5.66	5.66	30	6.16	1.03	-	-	LN	2.70	7		
66	Alamalu	28	11379	6		2.93	2.93	48	3.73	0.93	-	-	LN	2.50	8		
67	Parameshwari	24	11074	4		4.60	4.60	42	5.30	0.88	-	-	LN	2.90	3		
68	Deepa	20	10873	2			0.00		0.00		-	-	LSCS	3.10	8		

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1		
69	Meeakala	21	10777	4		5.33	5.33	40	6.00	1.00	-	-	LN	3.00	7		
70	Suloshana	23	11509	4		4.91	4.91	50	5.75	0.96	-	-	LN	3.25	8		
71	Nagaeshwari	23	11556	2			0.00		0.00		-	-	LSCS	3.10	7		
72	Tamilselvi	27	11554	4		5.92	5.92	40	6.59	1.10	-	-	LN	2.80	7		
73	Mohana	21	11573	1	4		4.00		4.00		-	-	LSCS	3.20	7		
74	Arthi	26	11567	1	4		4.00		4.00		-	-	LSCS	2.80	7		
75	Shanthi	26	11739	1	9		9.00		9.00		-	-	LSCS	3.10	6		
76	Poorhodi	21	11748	3		5.00	5.00	40	5.67		-	-	LSCS	3.50	2		
77	Vijayalakshmi	22	11748	5		4.68	4.68	40	5.35	1.07	-	-	Ln	2.75	6		
78	Sasikala	23	12073	8		1.61	1.61	30	2.11	1.05	-	-	LN	2.70	8		
79	Yogasewari	19	12078	3		6.00	6.00		6.00		+	-	LSCS	2.90	6		
80	Puvaneeshwari	19	12194	4		3.00	3.00		3.00		-	-	LSCS	2.50	7		
81	Loganayagi	18	12730	2	4	9.00	13.00	45	13.75	0.73	-	-	LN	2.80	8		
82	Jaya	25	12712	3		5.89	5.89	40	6.56	0.94	-	-	LN	2.75	8		
83	Usha	33	12714	5		5.73	5.73	45	6.48	1.30	-	-	LN	2.50	8		
84	Rajathi	26	12700	5		5.48	5.48	40	6.15	1.23	-	-	LN	2.50	7		
85	Kumari	27	12760	2	4	9.00	13.00	30	13.50	0.64	-	-	LN	3.00	7		
86	Thangam	21	12698	7		2.23	2.23	45	2.98	0.99	-	-	LN	2.75	6		
87	Suryakala	20	12602	3		6.83	6.83	50	7.66	1.09	-	-	LN	2.50	8		
88	Yashtha	22	12335	4		4.72	4.72	60	5.72	0.95	-	-	LN	2.80	8		
89	Kavitha	24	12324	3		6.32	6.32	42	7.02	1.00	-	-	LN	2.50	8		
90	Nirmala	21	12242	1	5		5.00		5.00		-	-	LSCS	2.50	7		
91	Gomathi	25	12240	1	7	10.00	17.00		17.00		-	-	LSCS	2.90	7		

92	Lakshmi	23	12547	1	10	3.00	13.00	42	13.70	2.33	+	+	LN	3.00	8		
93	Manjula	25	14136	3		6.18	6.18	50	7.01	1.00	-	-	LN	3.40	7		
94	Selvi	29	14075	3		5.82	5.82	30	6.32	0.90	-	-	LN	2.80	7		
95	Saratha	21	14127	4		4.73	4.73	50	5.57	0.93	-	-	LN	2.80	8		
96	Aslanpathima	21	14191	3		6.04	6.04	45	6.79	0.97	-	-	LN	2.90	8		
97	Sumathi	22	14207	7		2.79	2.79	50	3.62	1.21	-	-	LN	2.90	8		
98	Rathna	26	14225	1	9	4.00	13.00	55	13.92		+	+	OF	2.23	7		
99	Sangeetha	20	14564	5		4.44	4.44	50	5.28	1.06	-	-	LN	3.10	8		
100	Israth	20	14652	5		5.45	5.45	40	6.11	1.22	-	-	LN	3.00	8		
101	Kamazhi	19	14648	1	9		9.00		9.00		-	-	LSCS	3.80	7		
102	Nirmala	21	14268	4		5.56	5.56	13	5.78	0.96	-	-	LN	2.40	7		

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1		
103	Vizalakshi	20	12774	9		0.05	0.05	55	0.97	0.97	-	-	LN	2.80	8		
104	Kapakavali	19	17520	2	6	12.00	18.00	40	18.67	0.73	-	-	LN	2.50	7		
105	Sithra	20	17429	3		6.36	6.36	30	6.86	0.98	-	-	LN	2.50	7		
106	Rukshana	20	16103	2	10	4.00	14.00	45	14.75	0.82	-	-	LN	2.75	5		
107	Varalakshmi	23	16153	5		4.72	4.72	42	5.42	1.08	-	-	LN	2.80	8		
108	Saraeshwathi	29	16879	2	9	4.00	13.00	45	13.75	1.21	-	-	LN	3.20	8		
109	Kowthami	29	16721	7		1.64	1.64	40	2.31	0.77	-	-	LN	2.75	8		
110	Prapavathi	24	16835	5		5.31	5.31	40	5.98	1.20	-	-	LN	2.30	7		
111	Kazinabanu	22	16800	3		6.47	6.47	45	7.22	1.03	-	+	LN	2.50	7		
112	Puspalatha	20	17512	1	9	4.00	13.00	50	13.83	1.75	-	+	LN	3.25	8		
113	Geetha	20	17468	2	7	10.00	17.00	45	17.75	0.85	+	+	LN	2.80	8		
114	Sithara	20	17430	4		6.00	6.00		6.00		-	-	LSCS	2.90	6		
115	Rathika	24	15442	1	8	1.00	9.00	17	9.28	7.00	-	+	LN	2.60	8		
116	Saranya	23	16424	2	4	11.00	15.30	15	15.55	0.73	+	-	LN	3.20	7		
117	Nirmala	24	16448	1	3	1.00	4.00	20	4.33	7.00	-	-	LN	2.50	8		
118	Liyoni	27	16621	4		5.00	5.00	35	5.59	0.93	-	-	LN	3.20	8		
119	Arunadevi	26	16645	7		2.74	2.74	30	3.24	1.08	-	-	LN	2.70	8		
120	Amul	20	16734	5		5.77	5.77	41	6.45	1.29	-	-	LN	3.05	6		
121	Sudha	21	16750	3		5.81	5.81	45	6.56	0.94	-	-	LN	3.00	8		
122	Harimal	20	16748	8		1.31	1.31	40	1.98	0.99	-	-	LN	2.50	8		
123	Kalaivani	22	16807	8		1.72	1.72	40	2.39	1.19	-	-	LN	2.50	8		
124	Kanaki	24	16827	1	6		6.00		6.00		-	-	LSCS	3.00	6		
125	Amul	20	16734	2	7	4.00	11.00	40	11.67	1.75	-	+	LN	2.75	7		
126	Muthulakshmi	25	16852	3		6.28	6.28	45	7.03	1.00	-	-	LN	3.00	7		
127	Peramavathi	21	16857	2	4	3.00	7.00	30	7.50	2.33	-	+	LN	3.25	8		
128	Navaneetham	20	17554	2	6	10.00	16.00	30	16.50	0.76	+	-	LN	1.80	6		
129	Chithara	19	17564	3		5.00	5.00	30	5.50	1.40	-	-	LN	2.75	7		
130	Alamalu	26	17520	8		1.57	1.57	45	2.32	1.16	-	-	LN	3.50	8		
131	Govinthamal	22	17507	4		4.50	4.50	45	5.25	0.88	-	-	LN	2.50	8		
132	Lalitha	20	17549	7		1.32	1.32	50	2.15	0.72	-	-	LN	3.50	7		
133	Puspalatha	24	17512	9		0.32	0.32	40	0.98	0.98	-	-	LN	2.70	5		
134	Nancy	23	17435	8		1.23	1.23	47	2.02	1.01	-	-	LN	2.25	8		
135	Goorinesha	24	17388	3		6.38	6.38	20	6.71	0.96	-	+	LN	3.00	8		
136	Subeitebaham	20	17112	1	6	4.00	10.00	40	10.67	1.75	-	+	LN	2.10	8		

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1	A

137	Anjalai	24	11059	7		2.60	2.60	10	2.77	0.92	-	-	LN	2.80	8		
138	Goothai	24	17037	9		0.28	0.28	45	1.03	1.03	-	-	LN	2.80	8		
139	Sagaya	21	16720	9		0.58	0.58	20	0.91	0.91	-	-	LN	2.75	8		
140	Kayalvili	19	17435	3		6.27	6.27	27	6.72	0.96	-	+	LN	1.80	6		
141	Pvitharadevi	21	17502	6		4.25	4.25	58	5.21	1.30	-	-	LN	3.00	7		
142	Chithra	19	17526	6		4.91	4.91	40	5.57	1.39	-	-	LN	3.00	7		
143	Pathmavathji	22	17687	7		3.23	3.23	35	3.81	1.27	-	-	LN	2.70	8		
144	Sangari	22	17225	7		2.72	2.72	40	3.38	1.13	-	-	LN	2.60	8		
145	Vijaya	29	17849	7		1.86	1.86	50	2.70	0.90	+	-	LN	2.50	8		
146	Karpagam	28	17851	3		6.21	6.21	40	6.87	0.98	+	-	LN	2.70	8		
147	Lakshmi	28	17821	7		3.38	3.38	45	4.13	1.38	-	-	LN	2.70	8		
148	Geetha	19	17850	2	6	3.00	9.00	45	9.75	2.33	-	+	LN	2.30	7		
149	Varalakshmi	19	18110	2	9	3.00	12.00	22	12.37	0.74	-	-	LN	2.40	7		
150	Renuga	26	18039	6		4.04	4.04	40	4.71	1.18	-	-	LN	2.30	7		
151	Sagila	23	18174	1	6	2.00	8.00	20	8.33	3.50	-	+	LN	2.20	7		
152	Rathika	18	18172	1	6	1.00	7.00	45	7.75		-	-	OF	4.00	5		
153	Lily	24	16575	1	7	2.00	9.00	20	9.33		-	-	SVD	2.50	8		
154	Hamalatha	20	19237	4		5.19	5.19	30	5.69	0.95	+	-	LN	3.00	7		
155	Dhanalakshmi	22	19272	8		2.46	2.46	20	2.79	1.40	-	-	LN	3.20	8		
156	Janu	24	19231	6		4.85	4.85	30	5.35	1.34	-	-	LN	3.10	7		
157	Sarala	30	19245	8		2.34	2.34	20	2.67	1.34	-	-	LN	2.85	7		
158	Eswari	21	19270	4		3.00	3.00		3.00		-	-	LSCS	2.25	7		
159	Jayalkshmi	23	19275	1	7	3.00	10.00	20	10.33	2.33	-	+	LN	2.80	8		
160	Bavani	21	19228	8		0.85	0.85	30	1.35	0.68	-	-	LN	3.25	8		
161	Hapsyselviya	20	19343	8		1.38	1.38	20	1.71	0.86	-	-	LN	2.75	7		
162	Lakshmi	19	18222	2	3	9.00	12.00	10	12.17	0.92	+	+	LN	2.50	7		
163	Sheela	18	18259	9		0.66	0.66	20	1.00	1.00	-	-	LN	2.80	8		
164	Velankani	23	18244	8		1.37	1.37	30	1.87	0.93	-	-	LN	2.80	-		
165	Kavitha	27	18083	1	7	8.00	15.00	90	16.50		-	-	LSCS	3.80	8		
166	Sureka	18	18258	6		4.30	4.30	30	4.80	1.20	-	-	LN				
167	Shanthi	25	18246	9		1.00	1.00	20	1.33		-	-	LN	3.20	8		
168	Santhana	24	18242	9		1.00	1.00		1.00	1.00	-	-	LN	3.20	7		
169	Jamuna	26	18273	3		6.50	6.50	45	7.25	1.04	-	+	LN	2.15	6		
170	Poovizhi	20	18280	1	7	3.00	10.00	90	11.50		-	-	VE	2.30	7		

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1	A	
171	Laxmi	20	18317	8		2.46	2.46	5	2.54	1.27	-	-	LNE	2.50	8		
172	Eswari	22	18266	2			0.00		0.00		-	-	LSCS	3.00	7		
173	Raziya	20	18333	1			0.00		0.00		-	-	LSCS	2.75	8		
174	Nagalaxmi	21	18354	6		3.18	3.18	50	4.01	1.00	-	-	LN	2.75	8		
175	Sornalaksmi	22	18236	6		2.24	2.24	30	2.74	0.68	-	-	LN	3.00	6		
176	Selvarani	23	18363	1	5	2.00	7.00	10	7.17	3.50	-	+	LN	3.50	7		
177	Mangalam	23	18320	6		4.03	4.03	40	4.70	1.17	-	-	LN	3.50	8		
178	Seetha	22	18212	2	6	3.00	9.00	35	9.58	2.33	-	+	LN	3.40	7		
179	Santy	20	18880	8		1.94	1.94	30	2.44	1.22	-	+	LN	3.40	7		
180	Nagammal	28	18377	3		7.38	7.38	40	8.04	1.15	+	-	LN	3.10	8		
181	Dhatchayini	24	13470	1	7	2.00	9.00	45	9.75	3.50	-	+	LN	2.75	7		
182	Alamulu	21	13484	1	7	2.00	9.00	30	9.50	3.50	-	+	LN	2.70	8		

183	Kumari	28	13461	6		3.53	3.53	40	4.19	1.05	-	-	LN	3.25	8	
184	Mary	26	13444	1	5	3.00	8.00	30	8.50	2.33	-	-	LN	2.60	8	
185	Rajalaxmi	23	13487	9		0.01	0.01	45	0.76	0.76	-	-	LN	2.90	4	
186	Barathy	20	13479	9		0.77	0.77	20	1.10	1.10	-	-	LN	2.50	7	
187	Shanthy	20	13479	8		1.28	1.28	50	2.11	1.05	-	-	LN	2.70	7	
188	Ammu	23	13426	4		4.00	4.00	40	4.67	1.75	-	-	LN	3.10	8	
189	Indra	20	13520	1	6	2.00	8.00	40	8.67	3.50	-	+	LN	3.25	8	
190	Geetha	21	13490	3		6.82	6.82	50	7.65	1.09	+	-	LN	3.25	6	
191	Usha	22	13462	2	5	2.00	7.00	20	7.33	3.50	-	+	LN	2.50	8	
192	Jayalaxmi	22	13493	1	5	2.00	7.00	30	7.50	3.50	-	+	LN	2.50	7	
193	Anitha	20	13491	2	7	3.00	10.00	40	10.67	2.33	-	+	LN	2.75	6	
194	Sangeetha	21	13480	1	6	3.00	9.00	30	9.50	2.33	-	+	LN	2.75	7	
195	Mahalaxmi	28	13548	2	5	8.00	13.00	20	13.33	0.81	+	-	LN	2.75	7	
196	Thangatha	26	13766	1	5	3.00	8.00	40	8.67	2.33	-	+	LN	2.50	7	
197	Kalaivani	20	13568	4		4.00	4.00	30	4.50	1.75	-	-	LN	3.00	7	
198	Anitha	21	13277	1	7	3.00	10.00	20	10.33	2.33	-	+	LN	2.50	8	
199	Uma	23	13561	9		0.30	0.30	40	0.97	0.97	-	-	LN	3.00	7	
200	Vasanthi	27	13586	8		1.95	1.95	20	2.28	1.14	-	-	LN	27.00	6	
201	Shanthi	22	13568	2	7	3.00	10.00	30	10.50	0.51	-	-	LN	3.20	8	
202	Ananthi	25	13570	1	5	9.00	14.00	45	14.75	0.78	+	+	LN	2.40	8	
203	Usha	22	13876	7		3.89	3.89	30	4.39	1.46	-	-	LN	2.80	8	
204	Maragatham	19	12767	7		3.03	3.03	20	3.37	1.12	-	-	LN	2.70	7	

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1	A
205	Deepa	20	13574	9		0.29	0.29	40	0.96	0.96	-	-	LN	1.90	7	
206	Devika	28	13589	4		4.00	4.00	25	4.42	1.75	-	-	LN	3.10	8	
207	Bhavani	23	13673	6		3.44	3.44	20	3.77	0.94	-	-	LN	1.80	7	
208	Megala	24	13611	1	7	3.00	10.00	55	10.92		-	-	OF	1.80	7	
209	Kalavathi	21	13544	1	7	3.00	10.00	45	10.75	2.33	-	-	LN	2.70	6	
210	Selvi	28	18257	6		4.28	4.28	20	4.62	1.15	-	-	LN	2.60	7	
211	Banumathi	19	13609	4		3.00	3.00	40	3.67		-	-	LN	3.20	8	
212	Jothi	18	13615	6		1.83	1.83	45	2.58	0.65	-	-	LN	2.20	8	
213	Gowthami	19	13668	1	4	3.00	7.00	30	7.50	2.33	-	-	LN	2.35	8	
214	Magaeshwari	25	13643	6		2.42	2.42	40	3.09	0.77	-	-	LN	3.00	8	
215	Karpagam	25	13367	1	6	3.00	9.00	20	9.33	2.33	-	-	LN	3.00	8	
216	Usha	19	13871	1	7	4.00	11.00	60	12.00	1.75	-	-	LN	3.00	8	
217	Radha	22	13865	1	9	3.00	12.00	50	12.83	2.33	-	+	LN	3.20	8	
218	Devi	20	13862	1	11	4.00	15.00	40	15.67	1.75	-	+	LN	2.80	7	
219	Kamazhi	21	13835	2	8	3.00	11.00	45	11.75	2.33	-	-	LN	3.00	8	
220	Deepa	20	13406	1	12	3.00	15.00	55	15.92		-	-	Vac	3.00	8	
221	Suguna	25	13816	3		7.40	7.40	35	7.99	1.14	-	-	LN	2.50	8	
222	Anitha	20	13792	8		0.95	0.95	50	1.78	0.89	-	-	LN	3.00	8	
223	Kumari	23	13793	1	10		10.00		10.00		-	-	LSCS	3.70	8	
224	Devi	24	13757	2	7	3.00	10.00	45	10.75	2.33	-	-	LN	3.00	8	
225	Priya	19	13440	2	8	10.00	18.00	60	19.00	0.80	+	-	LN	2.60	7	
226	Nirmala	25	13707	3		5.18	5.18	45	5.93	0.85	-	-	LN	2.25	8	
227	Nishanthi	18	13794	1	8	3.00	11.00	60	12.00	2.33	-	-	LN	2.90	8	
228	Grashi	22	13778	1	4	12.00	16.00	60	17.00		+	+	VAC	3.10	7	
229	Rajaseshwari	22	13748	7		2.01	2.01	45	2.76	0.92	-	-	LN	3.00	7	

230	Shanthi	25	13553	1			0.00		0.00		-	-	LSCS	3.10	7		
231	Kavitha	24	13661	8		1.70	1.70	30	2.20	1.10	-	-	LN	2.10	5		
232	Sarashvathi	22	13861	1	6	3.00	9.00	45	9.75	2.33	-	-	LN	2.10	7		
233	Dhavamani	20	13817	1	8	10.00	18.00	60	19.00		+	+	OF	2.80	7		
234	Victoriya	21	13677	2	7	4.00	11.00	30	11.50	1.75	-	-	LN	2.80	8		
235	Sasikala	18	13868	1	9	3.00	12.00	40	12.67	2.33	-	+	LN	2.80	7		
236	Pushpa	22	13914	9		0.05	0.05	50	0.89	0.89	-	-	LN	3.45	7		
237	Sumathi	23	13994	1	8	4.00	12.00	40	12.67	1.75	-	-	LN	3.10	8		
238	Gowri	21	13981	2	8	10.00	18.00	40	18.67	0.78	+	-	LN	2.75	7		

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1		
239	Devi	19	14030	7		2.60	2.60	40	3.27	1.09	-	-	LN	3.00	8		
240	Sumathi	25	13970	1	5	3.00	8.00	45	8.75	2.33	-	-	LN	3.10	7		
241	Usha	23	14004	2	6	3.00	9.00	30	9.50	2.33	-	-	LN	2.80	8		
242	Swathi	20	13955	1	8	4.00	12.00	45	12.75	1.75	-	-	LN	3.10	8		
243	Bharathi	25	14003	7		2.19	2.19	50	3.03	1.01	-	-	LN	3.20	8		
244	Rathna	19	14042	2	6	4.00	10.00	55	10.92	1.75	-	-	LN	3.10	8		
245	Manjula	25	14134	8		1.81	1.81	40	2.48	1.24	-	-	LN	2.50	7		
246	Kumari	20	14172	1	7	3.00	10.00	35	10.58	2.33	-	-	LN	3.40	7		
247	Kala	20	14197	5		4.28	4.28	25	4.70	0.94	-	-	LN	2.25	7		
248	Ambika	21	14127	2	6	9.00	15.00	40	15.67	0.61	+	+	LN	2.60	8		
249	Ajza	21	14191	5		5.55	5.55	20	5.88	1.18	-	-	LN	2.50	7		
250	Arunadevi	21	14192	1	10	3.00	13.00	30	13.50	2.33	-	+	LN	2.50	8		
251	Dhanalakshmi	18	14254	7		2.80	2.80	35	3.39	1.13	-	-	LN	2.40	7		
252	Nirmala	21	14268	6		3.48	3.48	40	4.15	1.04	-	-	LN	3.50	8		
253	Kalavathi	20	14236	2	5	4.00	9.00	35	9.58	1.75	-	-	LN	1.75	7		
254	Karpagam	26	13763	2	6	9.00	15.00	45	15.75	0.75	+	+	LN	2.50	7		
255	Malarvali	18	14893	6		4.22	4.22	30	4.72	1.18	-	-	LN	2.30	8		
256	Sivagumari	19	14449	1	8	2.00	10.00	50	10.83	3.50	-	-	LN	3.00	8		
257	Priya	25	13995	1	9	3.00	12.00	40	12.67	2.33	-	+	LN	2.25	7		
258	Karthika	18	14442	5		5.09	5.09	45	5.84	1.17	-	-	LN	3.25	7		
259	Suzatha	21	14050	1	5	8.00	13.00	50	13.83	0.88	+	+	LN	2.90	8		
260	Seema	22	14498	1	8	3.00	11.00	30	11.50	2.33	-	-	LN	2.60	7		
261	Malika	21	14486	6		3.22	3.22	50	4.05	1.01	-	-	LN	3.50	7		
262	Selvi	24	14353	1	9	3.00	12.00	30	12.50	2.33	-	-	LN	3.00	8		
263	Manzu	20	14555	5		4.95	4.95	20	5.29	1.06	-	-	LN	2.60	8		
264	Akila	22	14546	5		5.26	5.26	40	5.93	1.19	-	-	LN	3.00	7		
265	Thilaka	26	14556	2	6	3.00	9.00	50	9.83	2.33	-	-	LN	2.10	8		
266	Rajaseshwari	20	14576	3		11.00	11.00	30	11.50	0.64	+	+	LN	2.50	7		
267	Gomala	22	14595	3		4.00	4.00	45	4.75	1.75	-	-	LN	2.60	8		
268	Shanthi	18	14506	3			0.00		0.00		-	-	LSCS	3.50	7		
269	Anuratha	22	14657	1	7	3.00	10.00	40	10.67	2.33	-	-	LN	3.25	8		
270	Ratha	21	14638	6		4.43	4.43	45	5.18	1.30	-	-	LN	3.00	8		
271	Akila	19	14647	1	8	3.00	11.00	40	11.67	2.33	-	-	LN	2.60	8		
272	Israth	20	14652	2	7	10.00	17.00	35	17.58	0.60	+	+	LN	3.00	7		

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1		
273	Sangeetha	20	14564	2	9	4.00	13.00	40	13.67	1.75	-	+	LN	3.10	7		
274	Tamilselvi	23	21305	1	10		10.00		10.00		-	-	LSCS	3.00	7		

275	Kala	21	21242	7		2.42	2.42	30	2.92	0.97	-	-	LN	2.90	7	
276	Sundhari	20	21278	2	7	3.00	10.00	30	10.50		-	-	LSCS	3.00	8	
277	Kalaiarasi	24	21330	6		4.96	4.96	50	5.79	1.45	+	-	LN	3.10	8	
278	Smala	18	21336	2	10	3.00	13.00	55	13.92	2.33	-	+	LN	2.70	7	
279	Gomathi	25	21329	6		3.15	3.15	40	3.82	0.95	-	-	LN	2.90	8	
280	Parmashwari	19	21331	5		5.02	5.02	35	5.60	1.12	-	-	LN	3.20	8	
281	Jayasri	24	21328	1	8	2.00	10.00	25	10.42	3.50	-	-	LN	3.10	7	
282	Bahavani	20	21312	7		2.46	2.46	40	3.13	1.04	-	-	LN	2.80	8	
283	Dana	24	21249	2	6	3.00	9.00	20	9.33	2.33	-	-	LN	3.60	7	
284	Sangeetha	28	21264	1	8	2.00	10.00	30	10.50	3.50	-	+	LN	2.25	7	
285	Rani	21	21259	5		5.15	5.15	35	5.73	1.15	-	-	LN	2.65	8	
286	Nathya	23	21195	6		5.24	5.24	40	5.91	1.48	-	-	LN	2.25	8	
287	Balumani	19	21088	1	6	3.00	9.00	35	9.58	2.33	-	-	LN	3.00	7	
288	Iruthayamari	22	21235	5		5.51	5.51	45	6.26	1.25	-	-	LN	2.75	8	
289	Emimal	24	21357	1	8	2.00	10.00	30	10.50	3.50	-	-	LN	2.30	8	
290	Anuratha	28	21312	1	6	3.00	9.00	50	9.83	2.33	-	-	LN	3.20	7	
291	Damayanti	23	21334	1	7	9.00	16.00	40	16.67	0.78	+	+	LN	2.80	8	
292	Lakshmi	24	21335	1	8	2.00	10.00	45	10.75	3.50	-	-	LN	2.75	7	
293	Punaeshwari	23	20653	6		2.49	2.49	50	3.32	0.83	-	-	LN	3.00	8	
294	Devika	21	21092	1	9	3.00	12.00	30	12.50	2.33	-	+	LN	3.30	7	
295	Rajaeshwari	19	21212	1	8	3.00	11.00	35	11.58	2.33	-	-	LN	2.40	8	
296	Sithra	18	20654	6		3.32	3.32	30	3.82	0.96	+	-	LN	2.80	8	
297	Geemarani	25	21604	1	8	3.00	11.00	40	11.67	2.33	-	+	LN	3.40	8	
298	Gomathi	23	21560	1	6	3.00	9.00	30	9.50	2.33	-	-	LN	3.00	7	
299	Kalpna	24	21583	6		2.81	2.81	40	3.48	0.87	+	-	LN	2.80	8	
300	Parveen	17	21656	1	8	13.00	21.00	45	21.75	0.54	+	+	LN	2.50	8	

	RCD - rate of cervical Dilatation			VAC - Vaccum Delivery		G - Gravida
	PLP - Prolonged Latent Phase			BW - Birth Weight		LP - Latent
	PAP - Protracted Active Phase			A1 - APGAR 1 Minute		AP - Active
	ARM - Artificial Rupture of Membranes			A5 - APGAR 5 Minute		DTA - Deep

Sl. No	Name	Age	IP No.	ICD	LP	AP	I ST	II St	Total	Rate CD	ARM	Synto	Mode	BW	A1	A
	LN - Labour Natural							Comp - Complication						AOD - Arrest		
	LSCS - Lower Segment Caesarean Section							Abbreviations								
	OF - Outlet Forceps							IP No. - Inpatient Number								